

GRAIN & FEED JOURNALS CONSOLIDATED

Vol. XCI No. 11

Chicago 4, Ill., U. S. A., November 24, 1943

Price \$2.00 Per Year 25 Cents Per Copy

A Merger of Grain Dealers Journal, American Elevator & Grain Trade, Grain World and Price Current-Grain Reporter

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Herd

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Directory of the Grain Trade

In Organized Markets Only Members of the Local Grain Exchange Will Be Listed

HAVING YOUR name in this directory will introduce you to many old and new firms during the year, whom you do not know or could not meet in any other way. Many new concerns are looking for connections, seeking an outlet or an inlet, possibly in your territory. It is certain that they turn to this recognized Directory, and act upon the suggestions it gives them. The cost is only \$10 per year.

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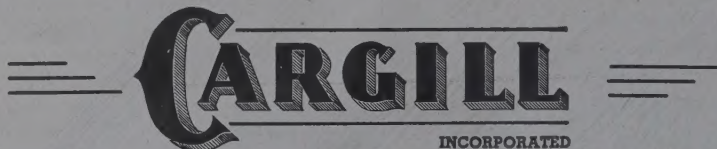
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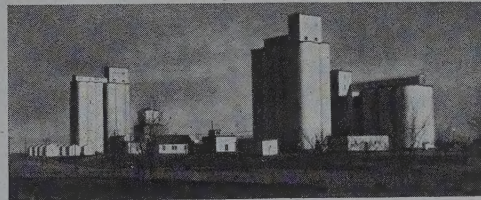
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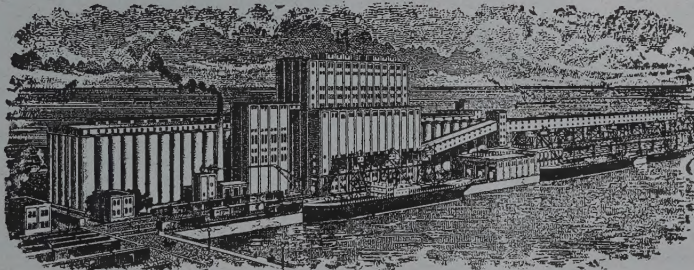
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A merger of Grain Dealers Journal, American Elevator & Grain Trade, Grain World and Price Current-Grain Reporter.

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Capacity of Elevator.....

Post Office

State

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Grain & Feed Journals
Consolidated

327 South La Salle St. Chicago, Ill.

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is a combination of our popular 7-card set, Form 3275 Spiral and our new Truck Loads to Bushels, Form 23,090 Spiral which reduce by 10 pound breaks any weight of grain from 600 to 23,090 pounds to bushels of 32, 48, 56, 60, 70 and 75 lbs.

* Carefully printed from large clear type, using jet black ink, showing the bushels directly beside the weight of grain reduced and distinctly separated by rules and spaces so as to prevent errors in reading. The most practical, the most helpful grain reduction tables ever published. Their use will return their cost every day of the busy season in labor and time saved and errors prevented.

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Both sets of tables are printed on heavy six ply tough check of durable quality, 11x13 inches with marginal index. Shipping weight, 3 lbs. You can get both sets described below for \$2.85, plus postage.

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Truck Loads to Bushels. Just what you have been wanting. Now let the big trucks come, so you can determine with a glance the number of bushels and pounds over in each load truck delivers. These six Clark's Direct Reduction Grain Tables continue the reductions made by Form 3275 Spiral, and have a range from 12,100 to 23,090 pounds. Reductions are by 10 pound breaks into bushels of 32, 48, 56, 60, 70 and 75 lbs. Shipping weight, 2 lbs. Price, only \$1.70 plus postage. Order No. 23,090 Spiral.

Direct Reduction Grain Tables									
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650	20	660	21	670	22	680	23	690	24
700	22	710	23	720	24	730	25	740	26
750	23	760	24	770	25	780	26	790	27
800	25	810	26	820	27	830	28	840	29
850	26	860	27	870	28	880	29	890	30
900	28	910	29	920	30	930	31	940	32
950	29	960	30	970	31	980	32	990	33
1000	30	1010	31	1020	32	1030	33	1040	34
1050	31	1060	32	1070	33	1080	34	1090	35
1100	32	1110	33	1120	34	1130	35	1140	36
1150	33	1160	34	1170	35	1180	36	1190	37
1200	34	1210	35	1220	36	1230	37	1240	38
1250	35	1260	36	1270	37	1280	38	1290	39
1300	36	1310	37	1320	38	1330	39	1340	40
1350	37	1360	38	1370	39	1380	40	1390	41
1400	38	1410	39	1420	40	1430	41	1440	42
1450	39	1460	40	1470	41	1480	42	1490	43
1500	40	1510	41	1520	42	1530	43	1540	44
1550	41	1560	42	1570	43	1580	44	1590	45
1600	42	1610	43	1620	44	1630	45	1640	46
1650	43	1660	44	1670	45	1680	46	1690	47
1700	44	1710	45	1720	46	1730	47	1740	48
1750	45	1760	46	1770	47	1780	48	1790	49
1800	46	1810	47	1820	48	1830	49	1840	50
1850	47	1860	48	1870	49	1880	50	1890	51
1900	48	1910	49	1920	50	1930	51	1940	52
1950	49	1960	50	1970	51	1980	52	1990	53
2000	50	2010	51	2020	52	2030	53	2040	54
2050	51	2060	52	2070	53	2080	54	2090	55
2100	52	2110	53	2120	54	2130	55	2140	56
2150	53	2160	54	2170	55	2180	56	2190	57
2200	54	2210	55	2220	56	2230	57	2240	58
2250	55	2260	56	2270	57	2280	58	2290	59
2300	56	2310	57	2320	58	2330	59	2340	60

090 pounds. Reductions are by 10 pound breaks into bushels of 32, 48, 56, 60, 70 and 75 lbs. Shipping weight, 2 lbs. Price, only \$1.70 plus postage. Order No. 23,090 Spiral.

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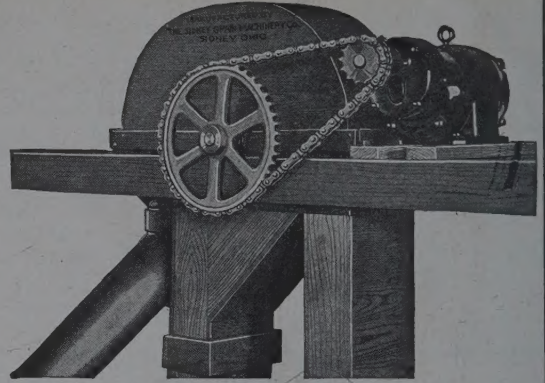
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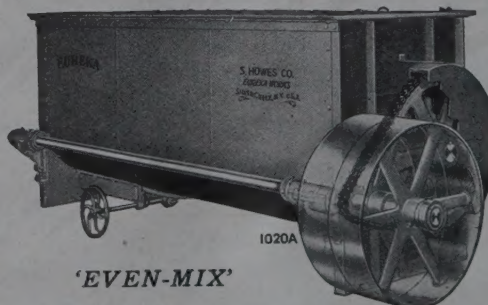
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GRAIN & FEED JOURNALS

CONSOLIDATED

INCORPORATED

327 S. La Salle St., Chicago 4, Ill., U. S. A.
Charles S. Clark, Manager

A merger of
GRAIN DEALERS JOURNAL
Established 1898

AMERICAN ELEVATOR &
GRAIN TRADE
Established 1882

THE GRAIN WORLD
Established 1928

PRICE CURRENT - GRAIN REPORTER
Established 1844

Published on the second and fourth Wednesdays of each month in the interests of better business methods for progressive wholesale dealers in grain, feed and field seeds. It is the champion of improved mechanical equipment for facilitating and expediting the handling, grinding and improving of grain, feeds and seeds.

SUBSCRIPTION RATES to United States, Canada and countries within the 8th Postal Zone, semi-monthly, one year, cash with order, \$2.00; single copy current issue, 25c.

To Foreign Countries, prepaid, one year, \$3.00.

THE ADVERTISING value of the Grain & Feed Journals Consolidated as a medium for reaching progressive grain, feed and field seed dealers and elevator operators is unquestioned.

Advertisements of meritorious grain elevator and feed grinding machinery and of responsible firms who seek to serve grain, feed and field seed dealers are solicited. We will not knowingly permit our pages to be used by irresponsible firms for advertising a fake or a swindle.

LETTERS on subjects of interest to those engaged in the grain, feed and field seed trades, news items, reports on crops, grain movements, new grain firms, new grain elevators, contemplated improvements, grain receipts, shipments, and cars leaking grain in transit, are always welcome. Let us hear from you.

QUERIES for grain trade information not found in the Journal are invited. The service is free.

CHICAGO 4, ILL., NOVEMBER 24, 1943

THE OPEN TOP BIN is credited with another death. An inexperienced helper fell into a bin which had neither top nor guard rails.

WHITE CORN HYBRID seeds are now obtainable and, no doubt, the O.P.A. will allow growers to accept the most attractive premium which has prevailed in all markets during the last five years.

FROM THE DUST BOWL of southwestern Kansas again comes the cry of all fields being blown away notwithstanding the political campaign for 1944 will not attain dangerous proportions until late in the summer of 1944.

FARMERS WHO ARE PLANNING on feeding some of their soybean crop should not be permitted to ignore the fact that the result will be soft, mushy meat which will not command a premium in any market. Far better feeding results will be obtained through the use of soybean meal.

SHIPPERS OF THE SOYBEAN SURPLUS sections are praising the railroads for their efficient transporting of their shipments to market. When Mr. Hitler is thoroughly licked and the railroads' orders for new box cars are filled even better service will be provided.

EVERY COUNTRY ELEVATOR OPERATOR can help his farmer patrons to better prices by selling all seed of the variety best adapted to his soil and climate. Shipments of mixed varieties and of varying quality generally results in an irritating discount for both grower and shipper.

WOODEN AND STEEL STORAGE BINS are being rented to growers in Western Kansas by the C.C.C. for one-thirtieth of a cent per bushel per day. While some growers may be disposed to make use of the empty storage bins, buyers of new crop grain will scrutinize every lot offered to determine its moisture content and its probability of heating in storage.

COUNTRY BUYERS of new corn are bound to discount every lot offered to allow for the heavy shrinkage which is sure to occur. The better the ventilation of the cribs the fewer will be the losses traceable directly to heating in unventilated cribs. Corn buyers who pay corn ceiling prices for corn containing 23% water will experience difficulty in collecting for the shrinkage.

THE VOLUME of trading in rye for future delivery is daily exceeding the transactions in wheat options, for the first time in history. Oats have exhausted their spread under parity, and advanced above that to a precarious level. Corn is at parity, and can not rise without raising its ceiling. Rye on the other hand has some 15 or 20 cents to go, hence the speculative interest.

GRAIN ELEVATOR OWNERS on railroads, which have been granted permission to abandon their tracks, will be pleased to learn of the remarkable success of one Oklahoma operator, who not only refused to quit business, because the railroad tracks to his station were abandoned, but had the courage and enterprise to build a new 100,000 bushel fireproof elevator to care for his increased business.

ONE OF THE RECENT ENCOURAGING events is the re-election of the president of the National Grange. He has made a vigorous fight against Federal food subsidies. He wants all farmers paid the market value for their products. Depressing the market value of grains and then loading posterity with taxes to defray the expense of subsidies to pay for the cheaper food supplied to present generations is repugnant to growers.

A VERMILLION, S. D., bank is now displaying the Mullaney Grain Co.'s exhibit of choice ear corn that should encourage all visitors to plant nothing but choice hybrid corn that is known to be well adapted to soil and climate of the grower.

HERE IS A NEW HAZARD for handlers and shippers, at least, the firemen's explanation of the cause of the fire discovered early Sunday morning at Quincy, Ill., credited the cause to the ignition of dust in wind-piping from bins and bean handling machinery.

ELEVATOR OWNERS who have an obsolete or worn out manlift still doing duty in their plants, will be shocked to learn of a Stanton, Ia., grain and livestock company being sued for \$6,397 damages for the death of a helper, who stayed near the base of the manlift which he had just used in descending from the cupola, only to be crushed by falling parts of the car, after he had stepped off of it. Compensation insurance would have been a good investment for the elevator operator.

MANY IMPROVEMENTS now made possible through war time developments promise to effect a marked saving in the cost of elevator machinery because of greatly reduced weight without any reduction in strength. A new steel plant is now being established at Allenport, Penn., that will supplant all solid car axles with hollow axles. Aluminum and magnesium will help in effecting a reduction in weight and increase in strength in many machines, as well as in the construction of reinforced concrete storage bins.

THE O.P.A. PRICES for corn in the northern counties of Kansas are claimed to be 15 to 20 cents higher than in the southern counties of Nebraska. This, of course, encourages Nebraska farmers to deliver their corn to Kansas points, and the director of stabilization is, no doubt, having a real struggle with equalization, because the C.C.C. has repeatedly promised farmers, selling corn at present ceiling prices, with assurance, that any corn sold before December first would be benefited with any advance made in delivered price before December first.

ILLINOIS FARMERS and some of the courts are beginning to question the authority of the O. P. A. to prosecute and fine, without court action, those whom it charges with violating ceiling regulations. In fact, one Illinois farmer has been asked to remit \$50.00 as damages because his wife sold chickens for 30 cts. a pound when the ceiling was only 27.5 cts. a pound. The farmers are not the only ones finding fault with the snooping methods and the autocratic practices of the O. P. A. in collecting evidence and assessing fines after promising immunity from prosecution.

Known Causes of Fires

The causes of the thirteen fires reported in our news columns of this number are common and well known to all students of fire hazards, and yet they continue to start fires with disastrous results.

One of the common causes is the accumulation of rubbish such as torn bags and accumulated grain dust which provides a warm reception for discarded cigarettes. This brought about the death of two firemen and serious injury to a third, as well as the destruction of a prosperous New Jersey feed mill.

The slipping v-belt again demands a seat in the Destruction Gallery. Accumulated soot, burning in a horizontal stovepipe, started another fire that should have been prevented by cleaning. The old time locomotive spark has again found a combustible resting place on the elevator with disastrous results. Sparks from a cob burner flew up the spout to the elevator cupola and started another fire, simply because the check valve on the bottom of the spout was again left open. An overheated bearing was charged with being out of alignment.

One other fire was caused by an overheated bearing, which is so common, the oiler and the men entrusted with keeping all machinery in alignment will, no doubt, inspect the plant more vigilantly.

Operators can and should make a study of the fire hazards of their plants and thereby reduce fire losses and the cost of fire insurance.

Public Is Learning About Bureaucrats

Earnest students of government have been preaching for years on the evils of bureaucratic government without arousing the electorate. The man in the street now is getting his first taste of what bureaucratic control really means, and he does not like it. If the great mass of the people really decide to do something to rid themselves of this incubus it will go hard with the office-holders.

According to Websters' dictionary a bureaucrat is an "official who prefers to conduct his business thru a system of bureaus and thus avoid personal responsibility." The purpose is to pass the buck, and give the citizen the run-around.

Suppose the manager of a grain elevator desires to find out his status with reference to being drafted into the war. He finds that three different agencies of the federal government are involved, the Selective Service Administration, the War Manpower Commission, and the United States Employment Service.

The War Manpower Commission does not defer anyone, but it lists the essential activities. The U.S.E.S. does not defer any draftee, but certifies to the

local draft board that the registrant is or is not engaged in a war critical occupation. The procedure is so involved that the citizen lacking the ability of a Philadelphia lawyer is unable to determine for himself what his status is.

Speculation in Business

No merchant engages in any line of business without knowing he may fail. He invests his own or borrowed capital and speculates on the result. The farmer buys the adjoining 80 acres with the expectation of realizing a profit from his investment, but he knows that failure in his different activities may prevent his realizing any profit from the land acquired. Speculation always has entered largely into every business venture and, doubtless, always will, but enterprising citizens who have the courage to speculate will continue to venture their capital and credit in an effort to employ their capital, skill and labor profitably.

The farmer may be favored with sufficient rain and sunshine to produce a large crop, but his speculation in production is extended to his ability to market his grain at a profitable price. Selling is just as essential to his success as production.

Some farmers, in the days of easy loans by the C. C. C., borrowed on their crop and held the grain for a hoped for advance in market prices. But, of course, if the life of the C. C. C. is terminated Dec. 31, 1943, the farmer will no longer be protected by the C. C. C. controlled prices for grains, and thereafter will carry the full responsibility of his speculation, and in case of large crops and depressed prices will, no doubt, accept a much lower price as a result of his speculation. By selling his surplus grain in the market for future delivery he can easily protect himself against any further decline in the market value of his product.

The speculative element always has and always will accompany ownership of any products produced in large volume, but there is no necessity of a grower taking all of the responsibility of ownership when the future markets afford him an opportunity to unload his speculation on the central market speculators.

While politicians have not yet enacted legislation denying the producer the right to unload the speculative element in his products on others, some vote chasing agitators cloud the issue by misrepresenting the speculators who absorb the speculative element in the grain business and thus steady the market and minimize the vacillations in price due to variations in the daily supply and demand.

Grain stored on the farm is exposed to fire, lightning, wind and destructive insects, as well as heating and deterioration, but futures are not affected by any of those destructive elements.

Object to Feeding Wheat

The large diversion of choice wheat to feed for animals and alcohol is finally causing flour millers real disturbance, and they have protested against the diversion of wheat from ordinary channels lest the supply needed for human food be exhausted before a new crop can be produced.

Now that the U-boats are no longer interfering so effectively with the exportation of wheat more flour and wheat will, no doubt, be exported to the hungry nations of Europe. The fact that the millers are becoming anxious about the supply should place the bread eaters at rest. The large crop of corn, sorghums and other valuable feed grains will, no doubt, help to satisfy the demand for feed for livestock and thereby correct the need for feeding choice milling wheat to pigs.

Naturally men of experience in the grain markets blame O.P.A. ceiling prices for the holding of corn on the farm. If the feeders were permitted to pay a quarter more for a bushel of good corn the growers would, no doubt, be tempted to release a greater volume of the 1943 crop to the feeders.

Harmful Effect of Subsidy Roll Back

It is not without reason that so many varied interests of the American body politic are voicing protests against the Administration's announced purpose to pay part of the consumer's cost of living by subsidizing the growers and processors.

Already we have a swollen list of government employees living off the taxpayers. The subsidy would add millions more of the citizenry living in part off the taxpayers. As prices are raised from time to time the subsidy would have to be increased to take care of the widened spread.

No great exercise of the imagination is required to visualize the nation as a great snake trying to live by eating its own tail, eventually reaching the impossible situation of eating its own head.

In reaching down to pay the subsidy to every individual engaged directly or indirectly in production or manufacture the government would find it necessary to control every business. No one could lift a finger without government permission. Private initiative would be paralyzed. Production would fall off due to the absence of the profit motive.

The burdensome civil list of the federal government would have to be greatly expanded to administer this new function. An example is afforded by the social security administration where the expense of operating the system equals one-fifth of the sum paid to beneficiaries.

Admission of Co-operatives to Exchange Membership

The rules committee presented to the directors of the Chicago Board of Trade Nov. 10 a new regulation defining more particularly co-operative ass'ns of producers and the privileges to which they may be entitled under the rules of the Board. The contemplated regulation, which will no doubt be adopted, reads:

REGULATION 1062. Co-operative Association of Producers.—A lawfully formed and conducted co-operative association of producers having adequate financial responsibility, engaged in any cash commodity business, conforming to the following requirements:

First: The co-operative ass'n must have not less than 75 per centum of the voting capital stock, or membership capital, in good faith owned and controlled, directly or indirectly by producers of agricultural products;

Second: The co-operative ass'n, if organized without capital stock, shall not allow a member of the co-operative ass'n more than one vote, or if organized with capital stock, the co-operative ass'n shall not pay dividends on any class of capital stock in excess of 8 per cent per annum cumulative;

Third: The co-operative ass'n shall not, during any fiscal year, deal in the products of non-members of the ass'n to an amount greater in value than such as is handled by it for members of the ass'n.

Fourth: The ass'n, not more frequently than semi-annually, may pay out of its accumulated or current earnings and savings, patronage dividends to members of the ass'n only and upon the basis of business transacted with such members for the period covered by transactions in which such earnings and savings have accrued; and

Fifth: The ass'n, if domiciled in the state of Illinois, must be organized under the provisions of "The Agricultural Co-operative Act of 1923", enacted by the General Assembly of the state of Illinois, or, if organized under the laws of some other state, must be qualified to do business within the state of Illinois under the provisions of "The Agricultural Co-operative Act of 1923" and operate within the provisions thereof. It may be entitled to members' rates by virtue of a membership owned by one of its duly authorized representatives, and may be entitled to do business in cash grain and provisions on the floor by virtue of the memberships owned by two of its duly authorized representatives. A member who desires to designate such a co-operative association of producers for that purpose shall make application to the Board, giving therein such information as may be requested (Rule 226). If the application is granted, such co-operative ass'n of producers, as well as such member, shall be entitled to members' rates. Such designation may be terminated at any time by the member, or by the Board. A co-operative ass'n of producers entitled to members' rates shall be subject to all requirements and prohibitions contained in the rules and regulations applicable to members (except as may be exempted by the Commodity Exchange Act and the Regulations of the Secretary of Agriculture issued thereunder) and in such cases the member shall be subject to discipline and the membership subject to sale by the Board for the act or delinquencies of the co-operative ass'n.

C.C.C. Loan Rates on Grain

BARLEY, on farms, No. 1, 75c; No. 2, 73c; No. 4, 67c per bushel. In California, Idaho, Oregon and Washington, 5c higher.

SORGHUMS, on farms, No. 2 or better, 85c; No. 3, 80c; No. 4, 70c. In Arizona and California, 5c higher.

FLAXSEED at Minneapolis \$2.85 for No. 1. CORN, average 84c per bushel.

WHEAT, average \$1.23 per bushel on farm. SOYBEANS, \$1.80 per bushel at the country elevator for No. 2 green and yellow of 1943 crop.

RYE, for No. 2 or better, 75c on farm, 68c in warehouse, no farm storage payment.

C.C.C. Grain Loan Maturities

WHEAT, warehouse stored, Apr. 30, 1943; farm stored, Apr. 30, 1944.

CORN, all stored on farm, on demand, on 3-year period; but may be delivered on 30 days' notice by farmer.

BARLEY, on demand, but not later than Apr. 30, 1944.

GRAIN SORGHUMS, on demand, but not later than June 30, 1944.

Raising or Lowering Wages

The National War Labor Board on Oct. 26 adopted the following resolution:

"The exemption granted by General Order Four shall apply to any country grain elevator establishment at which not more than eight individuals are employed, even if the employer in all his plants or units employs a total of more than eight individuals."

This resolution was adopted as the result of earnest and persistent efforts of the Washington office of the Grain and Feed Dealers National Ass'n.

General Order No. 4 referred to in the resolution reads as follows:

(a) Wage adjustments made by employers who, at the time the adjustment is agreed to, or if not made by agreement, at the time it is placed into effect, employ a total of not more than eight individuals in all their plants or units, are exempted from the provisions of Executive Order 9250 of Oct. 3, 1942, and Executive Order No. 9328 of Apr. 8, 1943.

(b) Unless expressly extended, the exemption granted by this Order shall not apply to employers whose employees' wages, hours, or working conditions have been established or negotiated on an industry, association, area, or other similar basis, by a master contract, or similar or identical contracts.

(c) The exemption granted by this Order shall not apply to an employer who, during any given year following Oct. 3, 1942, in the case of wages, or Oct. 27, 1942, in the case of salaries, has made adjustments affecting 8 specific employees.

(d) The Regional War Labor Boards may recommend to the NWLB such exceptions to the provisions of this Order as are necessary to effectuate the wage stabilization policies of the National War Labor Board, which exceptions, if approved by the National War Labor Board, shall, unless otherwise specified, apply only within the territorial jurisdiction of the Regional Board recommending them.

Thus line elevator employee's wages may be adjusted now without special permission from W.L.B. if not more than eight persons are employed at the elevator or station at which such adjustment is to be made, and even though the owner of such elevator may employ more than eight persons in ALL of his elevators (such as a line elevator firm). "Line elevator" is one owned and operated by a firm owning and operating other such elevators.

Local Chapters of Friends of the Land are being formed in many places. These groups have adopted projects and arranged programs of authoritative lectures by means of which each of its members, no matter what his specialized interest in the land may be, gets a comprehensive grasp of the whole picture of rain, soil and man in their eternal relationship.

Farm Goals for 1944

War Food Administrator Marvin Jones says "It is extremely gratifying to note that the farmers of this country, acting on a purely voluntary basis, have set goals that exceed those for the banner production years of 1942 and 1943."

The goals set in a series of state meetings are as follows:

	1943 *Indicated Acres	1944 *Goal Acres	Goal as % of 1943
Grain and Hay	293,646	307,724	105
Corn, planted	96,818	100,253	104
Oats, planted	42,654	39,558	93
Barley, planted	17,893	17,372	97
Sorghums, planted	17,220	16,740	97
Hay, all tame, harvested	60,489	62,838	104
Wheat, planted	54,159	67,030	124
Rye, acreage as grain	2,875	2,408	84
Rice, planted	1,538	1,525	99
Oil and Fiber Crops	45,041	48,423	107
Soybeans, for beans	11,480	13,654	119
Flaxseed, planted	6,289	5,895	94
Peanuts, grown alone	5,013	6,158	123
Cotton (in cultivation July 1)	21,995	22,277	101
Flax, for fiber	15	25	167
Broom corn, planted	249	414	166
Hay crop seeds: Red clover .....	....	1,781	...
Sweet clover .....	....	400	...
Timothy .....	....	394	...
Alfalfa .....	....	1,070	...
Alsike .....	....	217	...
Lespedeza .....	....	1,028	...

*Three ciphers omitted.

No Fraud in Sale of Feed

The Ralston Purina Co. was granted a new trial July 9, 1943, by the Supreme Court of Nebraska in its suit against Orval Iiams to recover \$1,253.65 unpaid on a contract to pay \$2,234.40 for 42 tons of hog Fatena Meal.

The District Court of Boone County had given judgment for only \$359.89. Defendant Iiams alleged 300 lbs of the Fatena was guaranteed to produce 100 lbs. of hog. The Supreme Court, however, held there was no guaranty. The court stated "The evidence clearly demonstrates that no fraud was practiced by the plaintiff in procuring the contract." "At most the statement attributed to the plaintiff was merely the local dealer's (Joe Niemeyer) talk, puffing and praising the goods, which is permissible."

The suit was remanded for further proceedings to determine the credits to which defendant is entitled, if any.—10 N. W. 2d 452.

Building Contract Controversy

The Michigan Bean Co. contracted with the Burrell Engineering & Construction Co. to build an elevator, warehouse and office building at Merrill, Mich. Burrell claimed the contract was for cost plus 15 per cent, while plaintiff contended it was for a fixed amount.

The Bean Company brought suit in the Circuit Court of Saginaw County to restrain Burrell from making claims of a cost-plus contract and to enforce its obligation to write a fixed price contract as agreed.

The suit was in equity and the court dismissed the complaint except as to the building contract. For this reason the Supreme Court of Michigan on Sept. 7, 1943, said the lower court should have dismissed the complaint instead of giving monetary damage to plaintiff for alleged failure to complete the contract, defective workmanship, delay in performance and overpayment.

In Michigan law actions must be brought on the law side of the court where the parties may have the benefit of a trial by jury. The Supreme Court dismissed the bill of complaint with costs of both courts to defendant Burrell, but without prejudice to the rights of either party to transfer the case to the law side of the court, where a jury could pass on the fact whether the contract was for cost plus or a fixed sum.—11 N. W. Rep. 12.



Frank C. Bell, Omaha, Neb., Pres.-Elect Grain Exchange

Asked—Answered

[Readers desiring trade information should send query for free publication here. The experience of brother dealers is most helpful. Replies to queries are solicited.]

Feed Grinding Essential

Grain & Feed Journals: I am employed in the feed manufacturing industry, but am seriously considering returning to the grain merchandising business in a terminal market. I have recently been reclassified to 2-A for a 6-month period. Would I jeopardize my draft status by making the above change?—E. H. F.

Ans.: The work being done by the individual carries more weight with local draft boards than the business. Thus a grinder or operator of a grain cleaning machine is more essential than an accountant or other clerk in a grain merchandising office.

In a general way food processing is considered more essential than grain merchandising.

Insurance on Wheat in Bond?

Grain & Feed Journals: If we store wheat from Canada under bond in the United States for the purpose of exporting or having it milled into flour for export, but the wheat is burned, will the insurance company reimburse us for more than the wheat was worth by allowing us the extra 42 cents per bushel duty that the government insists on collecting because the burned wheat was technically "consumed" in this country?—G. B. Noble.

Ans.: Yes, the underwriters will pay the loss provided the insured in compliance with the co-insurance clause has reported the wheat at its Canadian price plus freight to destination and plus the duty of 42 cents.

Use of Wheat and Distillers Grains in Dairy Feed?

Grain & Feed Journals: How could we use government program wheat and distillers grains in a feed for dairy cows?—Vernon Elevator & Lumber Co., Vernon, Mich.

Ans.: When alfalfa, clover or early cut mixed hay are fed at least twice daily with corn silage or corn stover, wheat may be substituted for corn in the customary ration up to 500 pounds per ton of the grain mixture.

For the corn gluten feed in the customary ration there may be substituted distillers corn dried grains, bearing in mind that corn dried grains have more digestible protein than the gluten feed they displace.

To obtain the maximum results from the dairyman's home grown grains and roughages the distillers grains and the ground wheat must be in balance. The correct balance can be worked out by using the data given in "Feeds and Feeding" by Morrison.

Outlet for Ground Corn Cobs?

Grain & Feed Journals: In your issue of Oct. 13, page 279, I notice an article about ground corn cobs for the Navy.

I am very much interested in this and want you to tell me how to get in touch with the proper official of the Navy as I am putting in a machine for grinding corn cobs and would like to have another outlet for them.

I am expecting to sell them to the Q. O. Chemical Co. at Memphis, Tenn., to be used in the manufacture of furfural which goes into the manufacture of synthetic rubber, but would like to have another outlet also.—Chas. P. Noell, Covington, Tenn.

Ans.: Ground cobs can be added to turkey feed.

Offers of corn cobs may be made to H. W. Hochbaum, U. S. Dept. of Agriculture, Extension Service, Washington 25, D. C., or to the Chief of the Division of Field Construction, Extension Service, U. S. Dept. of Agriculture, Washington. For this purpose of cleaning carbon out of airplane engines the cobs should be ground to pass thru a 12-mesh screen.

Moisture Content Compatible with Safe Storage?

Grain & Feed Journals: We have a customer in Venezuela that would like to know the highest percentage of moisture which could be allowed for storage of corn in a concrete bin, which would be safely isolated.—Seedburo Equipment Co., Chicago, Ill.

Ans.: American grown corn to grade No. 2 and to be safe to stand winter storage must not contain over 14% moisture, that is for shelled corn in any style of concrete bin that has solid side walls and bottom, but an open top.

Deferment for Elevator Manager?

Grain & Feed Journals: I am writing for some information in regard to the War Manpower Commission ruling on the draft status of grain elevator operators.

I would like to know the status of an owner and active manager of a 100,000-bu. (wheat) a year elevator that handles 30 cars of feed grains and sacked feed per year and does custom grinding.—Jackson & Son Elevator Co., Norwich, Kan.

Ans.: Additional data are required to determine the status of the owner and manager of the wheat elevator mentioned.

The local draft board determines the status. The procedure is as follows:

How to Request Occupational Deferment for an Employee. Request for occupational deferment must be made by filing with the Local Selective Service Board an Affidavit for Occupational Classification (Industrial) on D.S.S. Form 42-A (Revised 9-15-42).

Each case should be prepared with great care. Be sure to give complete detailed information to show (a) the essential nature of the activity in which the employee is engaged, and (b) why the registrant is a "necessary man" in that activity. The employee's duties should be described in detail. Evidence must also be included to show the degree of training, skill and experience required, and what efforts have been made to obtain and train replacements.

The list of critical occupations include: *The handling of grain, first processing of grain, grain assembly services (warehousing), feed mixing, flour milling, but does not imply or intend blanket deferment for these groups.*

The immediate effect of a worker's induction upon vital production, the availability of replacement for even unskilled labor, the current shortages of both skilled and unskilled labor, and the replaceability, all are factors Local Boards must consider in classifying and calling men.

In judging replaceability, Boards are instructed to consider: (a) the shortage of the registrant's skill in the total labor force, (b) the shortage of workers to replace even unskilled workmen, and (c) a shortage in the place of employment even when no national shortage exists.

The test of a necessary man is: (1) The registrant is engaged in an essential activity. (2) He cannot be replaced because of a shortage of persons with his qualifications or skill in such activity. (3) His removal would cause a loss in the effectiveness of that activity.

Local Boards are directed that whenever, after the most careful consideration, they conclude a registrant, alleged to be in a critical occupation in war production or support of the war effort, is not entitled to occupational deferment on the basis of his present employment, to refer the registrant's name and present occupation, together with a statement of his skills and qualifications and place of present employment, to the local office of the United States Employment Service in the area in which the Local Board is located.

Wheat held by mills Sept. 30 was reported Nov. 12 by the Bureau of the Census to amount to 121,949,552 bus., against 140,987,915 bus. Sept. 30, 1942. However, of the amount in store mills owned 105,955,845, against 100,572,168 bus. Sept. 30, 1942.

The Western Grain Dealers Will Meet

The 44th Annual Convention of the Western Grain and Feed Ass'n will be held at the Fort Des Moines Hotel, Nov. 29, 1943.

9:00 A.M. PROTEIN DISTRIBUTION—Round Table Discussion with Walter Berger, Des Moines Oat Products Co. and Feed Industry Council, as leader—Panel—O. D. Klein, USDA, Washington, D. C. Linseed Oil Meal—George Smith, Archer-Daniels-Midland Co. Soybean Oil Meal—K. J. Maltas, A. E. Staley Mfg. Co. Animal Proteins—W. P. Quinn, Armour & Co. Have your questions ready.

NUTRITIONAL FEED PROBLEMS DURING WAR—Dr. J. E. Hunter, Director of Research, Allied Mills. Dr. Hunter will take time after speaking to answer your questions.

SELECTIVE SERVICE—General Charles H. Grah, State Director of Selective Service. General Grah has just returned from Washington and has the latest information regarding this subject.

PUBLIC RELATIONS CAMPAIGN—Carroll Swanson, Chairman of the Finance Committee of the Feed Institute of Iowa. You will want to know of the splendid work of the Feed Institute of Iowa.

Afternoon Session

2:00 P.M. POULTRY CONSERVATION AND THE FEED INDUSTRY—Dr. Cliff D. Carpenter, Executive Secretary of the National Poultry Advisory Council.

OPA REGULATIONS—C. S. Gordon, Chief Grain, Feed and Flour Division of OPA. We hope by convention time Mr. Gordon can give us definite information on revised corn and grain ceiling prices. Mr. Gordon requests that you have your questions ready.

LEGISLATION—Ray Bowden, Executive Vice-President of the Grain & Feed Dealers National Ass'n.

BUSINESS MEETING—Election of six directors.

BANQUET—FEED SITUATION IN THE BRITISH ISLES—Herb Plambeck, Farm Editor WHO, Des Moines. Mr. Plambeck recently returned from a trip to England, and has an interesting story.

FOOD GOALS FOR 1944 AND FEED PROBLEMS—M. Clifford Townsend, Special Representative of the Administrator. Mr. Townsend was former Governor of Indiana and is an informative and interesting speaker.

Gov. Dwight Griswold of Nebraska has asked OPA Administrator Chester Bowles to take steps to correct the existing corn price ceilings by which corn sells in Kansas for more than it does in Nebraska.

R. O. Cromwell, who became well known as a crop statistician with Lamson Bros. & Co. and who was for a time with the Federal Crop Insurance Corporation, is now chief of the food grains section of the marketing reports division of the grain products branch of the Food Distribution Administration in the South building of the U. S. Department of Agriculture at Washington.

Coming Conventions

Trade conventions are always worth while as they afford live, progressive grain dealers a chance to meet other merchants from the same line of business under favorable conditions. You can not afford to pass up these opportunities to cultivate friendly relations and profit by the experience and study of others.

Nov. 29, Western Grain & Feed Ass'n, Des Moines, Ia.

Jan. 24, 25, Indiana Grain & Feed Dealers Ass'n, Columbia Club, Indianapolis, Ind.

June 5, 6, Central Retail Feed Ass'n, Hotel Schroeder, Milwaukee, Wis.

Letters from the Trade

[The grain dealers' forum for the discussion of grain trade problems, practices and needed reform or improvements. Dealers having anything to say of interest to members of the grain trade are urged to send it to the Journals for publication.]

Testimonials and the Railroads

Grain & Feed Journals: Note your remarks (pp. 373 re Railroads and Wallace). There is (pp. 373 re Railroads and Wallace). There is a magazine published in Chicago, "HOBBIES", and in Nov. issue, p. 120, the publisher makes some remarks that I think would interest you, re Wallace.

I might add that I, too, knew the elder Wallace, through the mails, about 35 years ago. I began in the business I am now in, that of distributing Distillers Dried Grains, in 1902. At that time by far the greater portion of the production was being exported to Europe. In this country, scientific feeding as we know it today, was an unknown quantity. For a number of years, I helped to carry on advertising to promote the use of Distillers Dried Grains. This was done in agricultural papers having a circulation east of the Mississippi River. The location of distilleries made the shipments west out of the question. Wallace's *Farmer* circulated in the west, hence was of no use to us. Nevertheless I was vigorously pushed for advertising, the final inducement being to write a testimonial letter endorsing the product (although he had never used it)—a practice not at all ethical. It used to be a part of patent medicine advertising, I believe (Lydia Pinkham and others).

"Dear Doctor: I had a pain in my heart, a pain in my kidneys and a pain in my lights, but since using your electric belt I have electric lights."—J. W. Greenfield, Louisville, Ky.

Do More Business Without a Railroad

Grain & Feed Journals: We are getting along without a railroad. Our railroad pulled the last cars of wheat from our elevator in January, 1939, and we felt very low when we watched the locomotive pull out for the last time. In a talk with our Banker at that time on the probable future of Hinton he made the following remark: "I have my furniture and fixtures charged off now and I am going to charge off my building this year so all I will have to do will be just move, if the worst comes to the worst."

I went home that night and decided that, we still had the same trade territory, the same farmers, the same resources, the same business men, and all we lacked was transportation.

In thinking over our own situation that night, I decided that if we had plenty of storage we could get along without a railroad, and I started to talk a thirty ton scale to my board at our next meeting, one that would be big enough to weigh any truck then on the road, and the largest I thought would ever be on the road. We installed that scale for the 1940 harvest. We had bought the Zobisch Elevator in 1935 which held 25,000 bu. of grain and we went thru the 1940 harvest with that much capacity, which was too small and we never knew whether we would be able to operate the next day or not, but the trucks hauled all night, the terminals stayed open to receive our wheat and we got by.

That year we got approved for handling Government Loan wheat being the first inland elevator to be so approved. We stored 19,000 bu. of Loan wheat that year and got by with it very well. But I still wanted my 100,000 bu. elevator and talked it to my Board until I got them interested, then to the Bank for Co-operatives for a loan to build same. At the first meeting of the Stockholders they voted

the idea down, but in about a month we had another meeting and voted to build. That same evening we called the Chalmers & Borton Construction Co. and let the contract for our present 100,000 bu. concrete elevator. The loan was approved and we started construction on the 31st of October, 1940, and finished it in December, 1941. We went in debt for the entire cost of the elevator and finished paying for it on April 17, 1943.

We do not miss the railroad any more, because we have learned not to depend on it. We hauled 500 tons of coal into Hinton and stacked it in one pile last March and April; now Hinton is the only town around here that has a supply of coal. You just learn to do things different when you do not have a railroad.

I really think that no one need to worry and spend a lot of effort trying to keep the railroad from taking up its rails. We spent all of our efforts up, until the railroad was actually taken out trying in every way possible to keep it. When it finally pulled out our town just decided we would not be licked and we were not. Our Bank now has more deposits than in the boom period of 1929, and our town does more business than it did in the past. So in conclusion I would say all you need to do is just change when conditions change and adapt yourself to the new order.—Farmers Coop. Elev. & Exch. Co., G. C. Hollis, Mgr., Hinton, Okla.

Death of George Chapman

Geo. A. Chapman died Nov. 6 at the Community Hospital, Geneva, Ill., aged 72 years.

For many years he was manager of the feed department of the Quaker Oats Co., which he left to organize the Riverdale Products Co. in 1923. At the time of his death he was president of the company with offices in Chicago.

A resident of Oak Park, he spent much time at his farm at Elburn, Ill. The funeral services were at Oak Park and interment at Elburn.

In 1913-14 he was president of the American



Geo. A. Chapman, Chicago, Ill., Deceased

Feed Manufacturers Ass'n, now one of the strongest trade organizations, in which he was an active worker. He is survived by his widow, a daughter and a son, Lt. T. J. Chapman.

Reporting Foreign Grain Futures Contracts

The U. S. Treasury Department requires that foreign grain futures contracts must be reported, using form TFR-500, listing such trades as of May 31.

Explanations of the requirements in the form of questions and answers have been prepared in the following by the Foreign Exchange Committee of New York:

1.—Who Shall Report.—Is any report on Form TFR-500 required of a person subject to the jurisdiction of the United States,—for example, a domestic broker, who had on May 31, 1943, a contract with a person in the United States to purchase a commodity on a foreign exchange,—for example, September Winnipeg wheat?

The person subject to the jurisdiction of the United States need not report because his contract is not with a foreign person. Only contracts with a person in a foreign jurisdiction are required to be reported. Thus, if a person in New York contracted with a Chicago broker for commodities on a foreign exchange and the broker in turn contracted with a person in a foreign country respecting similar commodities, the person in New York should not report but the broker must.

2.—Margins.—Is a margin deposit made in connection with a reportable commodity futures contract to be included as part of the cost of the contract?

No, it is to be reported under property type 7, "Other deposits." Margins deposited under contracts which themselves are not reportable, i.e., contracts with domestic brokers, should not be reported.

3.—Funds in Foreign Brokers' Accounts.—If a person on May 31, 1943 had funds in an account with a broker in a foreign country, but had no outstanding commitment on that date with the broker, must he report the account?

Yes. The account should be reported on Series B under property type 7, "Other deposits," and be described under Part D.

4.—Contract to Buy.—On May 31, 1943, a person had a reportable contract to purchase a commodity on a foreign exchange; for example, 10,000 bus. of Winnipeg September wheat which he had agreed to purchase at \$1.50 bu. from a broker in Winnipeg, putting up margin of \$5,000. The market price at the reporting date was \$1.52. How shall the contract be reported?

On the Series B form for Canada the margin is to be reported under property type 7, "Other deposits." The contract is to be shown under property type 17, "Options and futures in commodities," extending total contract price (\$15,000) in column (a), "Cost or face value," and total market price (\$15,200) in column (b), "Book, market, or estimated value." The description in Part D shall include the "position" of the reporter and the name of the person with whom the contract was made.

5.—Contract to Sell.—On May 31, 1943, a person had a reportable contract to sell a commodity on a foreign exchange; for example, 10,000 bus. of Winnipeg September wheat which he had agreed to sell at \$1.50 bu. to a broker in Winnipeg, putting up margin of \$5,000. The market price at the reporting date was \$1.52. How shall the contract be reported?

The margin is to be treated as described in question 4. The contract is to be shown under property type 17, "Options and futures in commodities," extending total contract price (\$15,000) in column (b) and total market price (\$15,200) in column (a). The instructions given in question 4 are to be followed with regard to the description in Part D.

6.—Reports by Brokers.—A domestic broker had entered into a number of long and short futures contracts in Winnipeg wheat with Canadian brokers. His net position at May 31, 1943, was zero (i.e., total long contracts equivalent to total short contracts) and his margin deposit on that date was \$9,000. Is he required to report?

Yes, in accordance with the method outlined in the answers to questions 4 and 5 above. A report is required as to both sides of a spread position.

7.—Exemption.—What values should be used in applying to commodity futures contracts the exemptions specified for reports on Form TFR-500?

The higher of the amounts required to be entered under "Cost or face value" and "Book, market, or estimated value" should be used. Net loss or gain should be disregarded.

8.—Hedge Protection.—If a person on May 31, 1943, owned cash commodities in a foreign country and had a hedge in the futures market;

for example, a person owned 10,000 bus. of wheat at Port Arthur and had sold as a hedge 10,000 bus. of wheat on the Winnipeg Exchange, must both the cash commodity and the futures contract be reported and, if so, in what manner?

Both the cash commodity and the hedge-sale position must be reported. The ownership of the cash commodity should be reported under property type 18 on Series B, extending the total cost in column (a), and the total market value in column (b). The futures commitment should be shown under property type 17, extending the appropriate values in columns (a) and (b), in accordance with questions 4 and 5 above, as appropriate.

9.—Cash Deferred Delivery.—If a person on May 31, 1943, had outstanding purchase or sale contracts requiring delivery of a cash commodity (wheat) on a deferred delivery basis and had sold or purchased futures on the Winnipeg Exchange as a hedge protection, is he required to report his contract of purchase, as well as the futures commitment?

Only the futures commitment should be reported, but the contract of purchase or sale should be referred to in Part B of Series B. In addition, advance payments to foreign persons on purchase contracts should be reported under property type 14, "Accounts and Bills Receivable."

He that withholdeth corn, the people shall curse him; but blessing shall be upon the head of him that selleth it.—Proverbs 11:26.

Death of Chas. Wolohan

Charles Wolohan, aged 77 years, founder of Charles Wolohan, Inc., died early Nov. 2 at his home in Birch Run, Mich. He had been in ill health for several years as result of a heart ailment.

Mr. Wolohan first engaged in the grain business in his native town, Birch Run, in 1893, following several years of business experience in Meredith as manager of the Reardon Bros. mercantile store, and later when engaged in the hardware business at Clio he added lumber, feed, coal and building supplies.

As the business grew, in later years the Wolohan company took over grain elevators, feed and lumber businesses in seven other communities in northeastern Michigan. At the present time Charles Wolohan, Inc., operates in Birch Run, Merrill, Hemlock, Freeland, Gera, Saginaw, Gladwin and Beaverton.

Mr. Wolohan had the distinction of buying in 1900, the first load of beans produced for commercial purposes in Saginaw County. He was the oldest member of the Michigan Bean Shippers Ass'n, and was active in its affairs until poor health assailed him.

In addition to serving as president of Charles Wolohan, Inc., Mr. Wolohan was president of the Birch Run State Bank and Freeland State Bank and was a former president of the Birch Run Oil Co.

Surviving are the widow, four sons, Tom, of Gladwin; John, Robert and Richard, of Birch Run, and four daughters.



Chas. Wolohan, Birch Run, Mich., Deceased

Forced Ventilation in Drying Grain

By R. C. MILLER, Department of Agricultural Engineering and Ohio Agricultural Experiment Station.

Shelled corn, soybeans, or other grain containing more than 13 per cent, usually considered safe, can be dried by forced ventilation. This method can eliminate about all chance of spoilage through mold or rot.

WINTER VENTILATION.—During autumn and winter, the air is usually so cool and moist that it will not dry grain down to 14 per cent moisture. By the use of forced ventilation at intervals, the corn can be kept cool and well ventilated which should preserve it during almost any season of the year. The best time for cooling, usually, is at night or early in the morning. In September and October and again in April and May there may be periods of drying weather when ventilation will reduce the moisture content to below 14 per cent. Such weather is usually characterized by breezy, sunny days and cool nights. At such times the blower should be operated continuously. If the fan is operated only during the daytime, the grain may actually take on moisture while it is warming up. This warming period is essential to drying, but most of the drying takes place only when the cool air of the evening and night is forced past the grain. The best drying condition exists when the ventilating air is cooler than the grain. Usually the greater the difference between the day and night temperatures, the faster will the grain lose moisture.

AIR NEEDED FOR VENTILATION.—In tests conducted at The Ohio State University 1 to 3 cubic feet of air per minute per bushel of shelled corn gave good results. The higher amount is desirable as it permits rapid cooling and, during suitable weather, rapid drying. A fan that will deliver from 500 to 1000 cubic feet of air per minute should be ample to ventilate between 200 and 300 bus. of grain.

BLOWERS SUITABLE.—Almost any type of fan that will deliver air against a pressure of $\frac{1}{2}$ to $\frac{3}{4}$ inch of water should be suitable for this work. A small, multivane blower built of plywood was constructed and used in one of our tests. Full discussion of this blower is given in the Ohio Agricultural Experiment Station Bimonthly Bulletin No. 220, in an article entitled "Drying Stored Shelled Corn With Forced Ventilation."

HOW TO DISTRIBUTE AIR.—A perforated floor placed about 8 inches above the regular floor was used in most of the tests to get a distribution of air throughout the grain. Any type of material that will build such a floor may be used. If available, perforated metal floors may be used. In one case a plywood floor with one-eighth-inch slits, spaced several inches apart, was used for the floor. Another method is to make a floor of slats constructed of 1" x 2" or 1" x 3" boards laid with a one-eighth-inch crack between slats. Beveling the boards slightly so that the cracks are wider on the under side than on top will reduce clogging by broken grain or trash. A method that proved successful in one season's test was to place flues on the floor of the bin as shown in accompanying sketch. These flues were constructed with 1" x 8" boards on top and 1" x 4" boards for the edges. The bottom was left open with only cleats spaced about 2 feet apart to keep the flue in shape. The thickness of the cleats raised the flue enough above the floor to permit the air to escape from the flue into the grain. Covering bottom of flue with screen will prevent grain restricting flow of air.

These flues should be placed about 2 feet apart. One end of the flue should be connected to a cross tunnel which has a total cross section area large enough to reduce the velocity of the air in the main tunnel to less than 1000 feet per minute. For example, if the fan delivered 1000 cubic feet of air per minute, then the main cross flue should have a cross section area of

at least one square foot. A larger capacity flue is desirable because it will reduce the velocity and thereby insure more uniform distribution of the air to the tunnels.

HEAT NEEDED FOR RAPID DRYING.—If the grain must be dried during the winter months, then artificial heat usually is necessary. A temperature increase of 20 to 25 degrees in the air usually will permit drying the grain down to about 10 per cent moisture. Such a moisture content is low enough to permit easy grinding and to keep the ground product.

WARM WEATHER DRYING.—In warm weather, that is where the temperatures are above 55 degrees, drying usually takes place only on days when the air is relatively dry, a condition that usually exists when the wind is from the northwest and the sky is relatively free from clouds. If the grain is moist, that is above 14 per cent, then it may be necessary to operate the fan at intervals during warm weather in order to both cool the grain and change the air around the grain. Changing the temperature rapidly is an effective way of reducing danger of mold or other spoilage.

New Wheat Resistant to Saw Fly

Dr. L. H. Newman, the Dominion Cerealists, recently announced that the serious losses which have been suffered by prairie farmers for many years past by the destructive action of saw-flies may soon be a thing of the past.

Dr. Newman stated that an intensive breeding project to produce a wheat that would be resistant to saw-flies, and which project has been going forward at the various Dominion Experimental Farms for some 13 years past, may soon attain its goal.

The story of it all is most fascinating. In 1929, H. J. Kemp, assistant superintendent of the Dominion Experimental Farms at Swift Current, observed that Golden Ball durum solid stem wheat was not attacked by the saw-fly, and so he conceived the idea that perhaps a bread wheat variety, with a solid stem, and that would have the necessary high milling and baking qualities, might be evolved. Golden Ball being a durum wheat was not a suitable parent to use in these experiments, and so a search was made by the Dominion Experimental Farms in many countries of the world for a solid stem bread wheat. Finally two such varieties were obtained from Professor Frankell of the Christchurch Experimental Station, New Zealand, who in turn had obtained them from Portugal. These two varieties were found to stand up against the attacks of saw-flies, but unfortunately they were not up to the high standard required for Canadian wheat in milling and baking qualities.

An elaborate breeding program was therefore outlined by which the New Zealand wheats would be crossed with a number of our high quality Canadian varieties with the hope that out of the many thousands of strains a selection might be found that would resist the attacks of saw-flies, and which at the same time would be of that high quality required by a Canadian wheat.

The plant breeding work was placed in the hands of Arnold Platt, with his two assistants, Mr. George Darroch and J. Dore. For seven years these able plant breeders have patiently pursued their work, and out of the innumerable crosses they made throughout the years they found several selections which appeared to have the qualities required, and which in addition were resistant to saw-flies.—Searle Grain Co.

Winnipeg, Man.—A. H. Oatway, a farmer, has brought action in court for an accounting of the Canadian Wheat Board's operations for the past five years. The Board has countered with a statement that it is not bound to account to any producer from whom it has bought wheat, that whatever accounting it has to make is to the Crown.

Wheat Outlook and Policies

STANFORD UNIVERSITY.—With world wheat supplies for 1943-44 about equal to the unprecedented total of five and nine-tenths billion bushels last year, the crucial wheat problems now are ones of policy and management which must make sure that too much of the grain is not diverted to nonfood uses.

This is one of the major conclusions presented today in the study by Dr. Joseph S. Davis, Director of the Food Research Institute at Stanford and Professor of economic research.

The report points out that "judicious restraints on use of wheat for feed, alcohol, and fuel are needed if ample reserves are to be held for prospective food relief. The problems ahead call for vital policy decisions and far-sighted management, national and international."

Sound management can insure that all military, lend-lease, relief, and commercial demands for export shipment will be supplied, the report declares, but the difficulties lies in achieving such management.

"The urgent need for a United Nations policy and plan for handling relief in Europe and the Orient has yet to be met, although progress is being made."

There must be continuous study, the report emphasizes, "not only by national governments in London, Washington, Ottawa, and elsewhere, but also by the International Wheat Council and the Interim Commission on Food and Agriculture."

"By contrast with 1917-18 and 1918-19," the report continues, wheat has been and is extremely abundant. Abundance, however, is relative. If wheat supplies were reserved solely for seed and food use, there is no doubt that the aggregate would be ample to provide for maximum potential requirements in 1943-44 and leave large carryovers against the possible conjuncture of shorter crops and larger food needs in 1944-45.

"There is enough wheat to permit continuation of larger feed and industrial use than is customary in peacetime, and even some fuel use where coal is scarce," as in Argentina.

But, in order to assure ample carryovers for 1944-45 in the United States, "prospects warrant restrictions on alcohol manufacture from grain, moderation in the expansion of feed use of wheat, and drafts on Canadian surpluses, lest our own 'granary' be unduly depleted," the study advises.

The report rejects as "so exaggerated as to be essentially false" the widespread impression that "scores or hundreds of millions in Continental Europe are literally starving now and are steadily becoming worse off."

"If this were true, it would call for radical changes in the food policies of the United Nations: among other things, drastically to curtail nonfood uses of wheat, corn, and soybeans, and production and consumption of animal products, in order to be able to ship to Europe the maximum possible starvation-preventing grains."

The study continues:

"In the last two years, deaths by starvation in Continental Europe have certainly been fewer than in China, and probably fewer than in two other populous members of the United Nations—India and Soviet Russia; and many of the deaths in Europe were due to deliberate Nazi oppression."

"Current European crops are such that over large areas of the Continent the food position should be better, not worse, than last year."

"Relief and rehabilitation tasks now call for strenuous, concerted efforts to have well-constituted reserves of food to follow the advancing armies until after complete victory is won."

"In amount and composition, these reserves should be adequate to supplement local supplies so as to cover urgent needs of liberated or conquered peoples."

"Quantities are needed to prevent not only starvation but semistarvation and also to correct the more serious forms of malnutrition; but

plans for wartime food relief should aim at modest levels of nutrition and diet."

In its conclusion, Dr. Davis' study criticizes "what we regard as seriously inflated notions as to the size and duration of the food shortage," which "continue to be voiced in some official and trade quarters."

"These notions stem partly from exaggerated ideas of the current and prospective calorie-food deficit in Continental Europe, partly from failure to recognize at their true value the surpluses . . . now and potentially available, partly from underestimates of current European agriculture . . . and partly from ideas . . . as to the heavy drafts upon agricultural productivity that raising the world level of nutrition will demand."

"The danger of these notions lies in the prospect that they may promote over-expansion and maldistribution of wheat production, and both delay and make more difficult the process of postwar readjustment."

Mexico's Record Rice Crop

The 1943 rice crop in Mexico, harvested mainly from August through December, is expected to reach a record of 5,600,000 bus., rough rice basis, according to the Department's Office of Foreign Agricultural Relations. Last year's crop amounted to 5,486,000 bus. The average for the 5-year period ending with 1941 was 4,598,000 bus.

Sonora, on the United States border in northwestern Mexico, accounts for 40 per cent of the total production. Rice production in that state was stimulated by completion of the Angostura dam in 1942.

Normally Mexico exports some rice but in 1943 exports were restricted by Governmental action because of the general food situation in the country. The largest quantity ever exported was 51,000,000 pounds of milled rice in 1942. Because of the restrictions on exports, the supply of rice in 1943 was maintained well above domestic requirements. Current prospects for a record crop should provide a substantial surplus during 1944. In view of the present costs of foodstuffs and the country's poor corn crop this year, the Mexican Government will be reluctant to grant licenses for rice exports.

"Can any individual justify an Office of Price Administration ruling that places the ceiling on corn at Benkelman, Neb., which permits the elevators to pay the farmers 92 cents a bushel, while at St. Francis, Kan., a few miles south, they can lawfully pay \$1.25 a bushel? Why does the OPA fix the farmer-to-farmer sale price on corn at Falls City, Neb., at 95 cents and the ceiling on the same type of transaction at Reserve, Kans., five miles away, at \$1.11?"—Congressman Carl T. Curtis.

A Modern Kentucky Elevator

Kentucky has long cherished the reputation as an outstanding producer of choice whiskey and prime grass seed. It also has well established credit for producing considerable other grain. Its record for 1943 with the ten-year average crop in parentheses (1929-1939) for wheat, 4,131,000 bus. (5,366,000); corn, 76,950,000 bus. (64,084,000); oats, 2,000,000 bus. (1,959,000); barley, 2,121,000 bus. (410,000); rye, 240,000 bus. (216,000); buckwheat, 20,000 bus.

Simpson County has a reputation for producing a large volume of choice quality Lespedeza and Orchard Grass.

As the state increases its production of grain the enterprising grain merchants of the state build better, modern elevators and render a better service to the growers. The elevator illustrated herewith is the Farmers Elevator at Franklin, the county seat of Simpson Co., Ky. Its storage tanks provide room for 70,000 bus. of bulk wheat. Its one leg receives grain from trucks and cars. The company also has a modern warehouse which will accommodate 230,000 bus. of grain in bags. Its cleaning department is equipped with modern Eureka cleaners designed especially for cleaning clover and grass seed.

The county seat of Simpson County is located on the main line of the L. & N. R.R. The company is managed by Howell Patton, Jr.



70,000-bu. Storage Tanks of Farmers Elevator at Franklin, Ky.

Crop Reports

Reports on the acreage, condition and yield of grain and field seeds are always welcome.

Perryton, Tex., Nov. 19.—Need moisture here for the growing wheat; very little pasture here.—Perryton Wheat Growers, Inc.

Springfield, Ill., Nov. 12.—Illinois 1943 production of leading crops with 1942 production in parentheses follows: Corn, 446,148,000 bus (433,438,000); winter wheat, 17,170,000 bus (12,623,000); oats, 113,632,000 bus (141,320,000); soybeans, 75,250,000 bus (73,794,000); tame hay, 3,261,000 tons (3,942,000).—A. J. Surratt, Agr. Statistician.

Mt. Vernon, Ind.—Posey and Vanderburgh counties have the lowest infestation of the European corn borer in the state. O. B. Riggs, county agricultural agent of Posey county, states. Two per cent of the corn stalks in Posey county were found to be infested with the corn borer in a survey by the Department of Conservation. No other counties have infestations so low; however, the corn borer is on the increase.—W. B. C.

Pampa, Tex.—The wheat crop this year in the Panhandle of Texas made about 6 bus. per acre. The growing winter wheat crop is very poor. We need rain, wheat is dying; we will not make a 25% crop next year. Feed corn this year is very poor; corn is selling \$2.25 cwt.; oats is selling \$1 bu. here. Soybean crop this year is only 10% crop. Plenty cattle and hogs for sale at bargain prices.—John Young, mgr., Old Grand Dad Feed Stores.

Topeka, Kan., Nov. 10.—The production of all sorghums for grain is estimated at 19,614,000 bus. and may be compared with 18,124,000 bus. produced in 1942 and the 10-year (1932-41) average of 10,758,000 bus. The yield per acre is estimated at 14.0 bushels compared with 16.8 bus. last year. The sorghum crop matured nicely with the exception of a few late fields. Recent weather has been favorable for the harvesting of sorghums.—H. L. Collins, Agr. Statistician.

Grenola, Kan., Nov. 17.—We are having fine fall weather with the exception that it is just a little dry, need rain to make stock water. Farmers have work well in hand considering that there are so few workers to do it. Soybean crop has been gathered, mostly a light crop; a number of fields had no beans worth saving. Many farmers now combining their kafirs, some good yields reported. Most of the corn gathered, light acreage, quite a few satisfactory yields.—The Grenola Mill & Elevator Co.

Helena, Mont., Nov. 1.—Production of dry edible beans in 1943 is estimated at 544,000 bags of uncleaned beans, which is the largest crop on record. Acreage expansion occurred largely on dry land, where yields of from two to five bags per acre were common. As a result of this dry land acreage, which was nearly as great as the irrigated acreage, the average yield dropped to 850 lbs. per acre. The yield on irrigated beans was slightly lower this year compared with past irrigated yields.—J. G. Diamond, Agr. Statistician.

Lafayette, Ind.—Favorable weather thruout October has increased the estimated corn yield for Indiana to 48.5 bus. an acre, one bushel higher than was anticipated a month ago, the Purdue University agricultural statistics department has announced. Improvement in the crop indicated a total production of 211,314,000 bushels, 2 per cent below the 1942 total. With approximately 75 per cent of the soy bean crop harvested a yield of nineteen bushels an acre was indicated with total production approaching 27,700,000 bus.—W. B. C.

Oklahoma City, Okla., Nov. 1.—The indicated yield of grain sorghums is 8.0 bus. per acre, the same as a month ago. The yield for 1942 was 12.9 bus. per acre and the ten-year average 9.7 bus. Production on Nov. 1 is estimated to be the same as a month ago, 8,472,000 bus., compared with 10,614,000 bus. in 1942 and 3,869,000 bus. for the ten-year average. Due to the combined effect of drought and early freezes, an early maturity of the crop has resulted, forcing many farmers to utilize a greater than usual proportion of their crops for forage and silage feed this year.—K. D. Blood, Agr. Statistician.

Toronto, Ont.—Growth of fall wheat was slow early in the season, but in most fields, the stands are heavy and uniform, although not showing normal amounts of top growth at this season. Most counties report a substantial increase in the acreage sown to fall wheat, with about normal seedling of fall rye. Some winter barley has been sown. New seedlings of hay and clover are thick and luxuriant. From an increased acreage of beans, the yields are averaging from 15 to 18 bus. per acre. Soybeans, however, were not sufficiently mature in many cases to give satisfactory yields, and the output is likely to be less than last year.—N. C. Engelter, Acting Director, Ontario Dept. of Agr.

Mahomet, Ill., Nov. 17.—Bean combining of 1943 crop completed in this territory on Oct. 30. First time in six years at least since bean harvest was completed in October. Average yield in this territory, about 22 bus. per acre. Acreage was about 5% larger than last year. Crop in the territory slightly larger because of increased acreage. Corn husking is about 95% completed. Yields apparently disappointingly abnormal and decidedly spotted. Late planting and wet conditions on best soil have been thought to be more responsible for low yields than insect infestation. Grape colapsis has been spoken of as more damaging in early growth of crop than corn borer seemingly affected later maturing and yield of corn.—James F. Parker.

Enid, Okla., Nov. 16.—With a deficiency of moisture in Oklahoma during September and October and no moisture up to this time in November the progress of the wheat planted this fall is a source of concern to most farmers and grain trade in general. We hear complaints from all the grain growing sections of Oklahoma, and panhandle counties which got off to a better start than most sections of the state are now worried because of continued dry weather. Some farmers have expressed the opinion that one of the greatest dangers to growing wheat is the fact that not enough rain has fallen to pack or settle the ground and therefore in the event of extremely cold weather there is grave danger of winter-kill. Owing to this dry weather condition it is apparent that the acreage seeded in Oklahoma has not met the amount of acres requested by the government. This, of course, is no fault of the farmers but solely due to weather conditions.—E. R. Humphrey, secy., Oklahoma Grain & Feed Dealers Ass'n.

Buckwheat Crop Report

The U. S. Dept. of Agriculture estimates the production of buckwheat in 1943 at 8,516,000 bus. compared with 6,887,000 bus. harvested in 1942, and the 10-year (1932-41) average of 7,029,000 bus. The 1943 yield of 17.3 bus. per acre is slightly less than in 1942 but the acreage is about 30 per cent larger. The season was generally more favorable than usual as frost came late enough to enable most of the late sown buckwheat to mature.

In the leading states the production was as follows (three figures omitted): New York, 2,775; Pennsylvania, 2,508; Michigan, 896; Minnesota, 416; Ohio, 360; Wisconsin, 261; West Virginia, 222; Indiana, 209; Illinois, 186; North Dakota, 132; Virginia, 130; Maine, 114; and Maryland, 100.

Lespedeza Crop Larger than Average

The U. S. Dept. of Agriculture reports that production of lespedeza seed, forecast at 165,900,000 pounds of thresher-run seed, is expected to be about 3 per cent smaller than the 1942 crop of 170,400,000 pounds but 74 per cent larger than the 10-year (1932-41) average of 95,564,000 pounds. The expected decline from last year is attributed to an 8-per cent reduction in yield per acre, which more than offsets the 6 per cent larger acreage. Generally speaking, production of lespedeza seed is smaller this year than last in southern and eastern producing areas, where decreases outweigh the larger production in the northern areas.

Fewer acres than last year are expected to be harvested in Arkansas, Alabama, Virginia, Mississippi, Tennessee, Louisiana, North Carolina, and Kentucky. On the other hand, more acres are indicated in Illinois, Missouri, Indiana, Kansas, Georgia, and South Carolina.

Drouth during the summer and fall was chiefly responsible for the reduction in yield per acre in most states. Growth was so short that combining was difficult. Yields may turn out better than expected because short stands often yield well and weather for combining has been excellent, in sharp contrast with the rainy weather last year, which resulted in much shattering of seed. Furthermore, no severe, early freeze occurred this year to match the killing freezes last year from Sept. 27-29. Only in Missouri and Illinois are larger yields per acre indicated, altho yield in Alabama may equal that of 1942.

The Kansas 1943 lespedeza seed production thresher-run is 8,700,000 pounds or the same as produced in 1942, according to a report issued co-operatively by the Kansas State Board of Agriculture and the Bureau of Agricultural Economics. The 1943 harvested acreage is

53,000 compared with 46,000 acres harvested in 1942. The yield per acre this year is estimated at 165 pounds compared with 190 pounds for 1942.

Hemp Crop of Kentucky

Henderson, Ky.—Harvesting hemp seed in Henderson County is in full swing with harvesting methods ranging from the hand-beaten style to the use of a new type beating machine, as well as converted threshing machines.

County Agent H. R. Jackson estimated 25% of the seed, a vital war product, has been harvested so far and that 90% has been cut and shocked ready for beating. Last year there were 2,900 acres devoted to hemp and this year 4,250 acres were planted. The earlier unfavorable season has resulted in a lower forecast of yield. County Agent Jackson believes many farms will not reach the eight-bushel average for the state last year. He believes the total yield will be between 25,000 and 30,000 bus.—W. B. C.

The 1943 Corn Yield

The U. S. Dept. of Agriculture reports that favorable weather during October, without widespread frosts, permitted most of the large acreage of late corn to reach maturity. This was particularly true for the late planted acreage in Iowa, Missouri, northwestern Ohio, and parts of Michigan and Indiana. Higher yields than a month ago in all of these states reflect better outcome for late planted corn.

The September frosts, occurring in the extreme northern part of the country, caused lower quality and lighter weight of grain, which is reflected in lower yield prospects on Nov. 1 for Minnesota, North Dakota, Montana, and Wyoming. In Wisconsin and Michigan, the gain in areas which escaped September frosts more than offset losses in the frost-stricken sections. A small proportion of the Illinois and Missouri crops will show some shrink from frost damage.

In South Dakota, yields were not measuring up to those indicated a month ago as harvesting disclosed greater damage from drought, but the amount of soft corn is negligible, despite the early frost. Early husking returns indicated that yields were not up to expectations in Pennsylvania, New Jersey, and Maryland, but were higher in the south central states, where the late corn responded to rains which checked the summer drought. Yield prospects were higher in the western states, with record yields in prospect for the Pacific Northwest.

The second largest corn crop on record, 3,085,652,000 bus., is indicated on Nov. 1. A crop this size would be 90 million bus. below the record 1942 crop of 3,175,154,000 bus. but 736 million bushels above the 10-year (1932-41) average of 2,349,267,000 bus.

Estimated yield per acre in 1943 and total production of corn by states, with comparisons, are here shown:

		Per Acre	*Production, Bus		
			Aver., 1932-41	Final, 1943	Oct., 1943
Mo.	31	105,681	146,899	135,300	139,810
Iowa	59	415,311	596,796	635,788	641,212
Neb.	25	119,177	242,708	204,675	204,675
Kas.	23.5	49,683	90,060	71,610	76,462
Ok.	12	29,501	35,631	22,149	23,112
Tex.	16	77,609	78,561	86,688	86,688
Colo.	15.5	11,199	19,138	13,427	14,353
Ill.	51	331,509	433,438	446,148	446,148
Ind.	48.5	160,688	216,702	209,138	211,314
Ohio	49.5	142,091	185,752	163,895	170,775
Mich.	35	51,199	89,708	49,010	52,780
Wis.	43.5	80,312	103,544	108,704	109,868
Minn.	42.5	153,017	207,190	235,272	224,698
N. D.	22	18,356	29,000	26,720	25,014
S. D.	23.5	40,642	103,214	87,800	82,532
Conn.	41	1,951	2,058	2,050	2,050
N. Y.	36	23,177	27,600	23,112	23,112
N. J.	35	7,233	8,370	6,808	6,440
Pa.	38	54,088	55,685	52,026	50,892
Del.	23	4,616	4,092	3,036	3,036
Md.	25	16,601	16,344	12,744	11,800
Va.	25	33,718	36,586	31,944	33,272
W. Va.	33	12,700	14,032	13,761	13,761
N. C.	22.5	45,496	47,068	52,030	53,212
S. C.	16	22,898	21,330	24,240	24,240
Ga.	12	42,876	39,160	43,572	43,572
Ky.	27	64,179	82,200	71,250	76,950
Tenn.	22.5	63,829	75,924	61,662	64,330
Ala.	15	43,597	43,960	46,080	46,635
Miss.	16	42,665	49,198	39,298	44,912
Ark.	12.5	34,406	37,116	23,506	24,488
La.	16.5	22,618	24,412	22,786	22,786
Mont.	18	1,835	3,400	1,794	1,950
Ida.	50	1,718	2,444	3,800	3,420
Wyo.	11	1,834	2,013	1,219	1,166
N. M.	15.5	2,543	3,792	2,712	2,898
Ariz.	11.5	447	396	402	402
Utah	31	588	792	810	837
Wash.	46	1,182	1,353	1,353	1,618
Ore.	36.5	1,946	1,742	1,725	1,825
Calif.	33	2,476	2,574	2,442	2,442

*000's omitted.

Grain Movement

Reports on the movement of grain from farm to country elevator and movement from interior points are always welcome.

Mahomet, Ill., Nov. 17.—Only corn coming to market is overflow of full cribs.—James F. Parker.

Oklahoma City, Okla., Nov. 1.—Harvesting of grain during October has made good progress and a considerable proportion of the crop is already out of the fields.—K. D. Blood, Agr. Statistician.

Duluth, Minn.—For the week ending Nov. 20, grain stocks decreased 4,553,000 bus., down to a total of 34,243,000 bus. Wheat holdings were sliced heavily and are now down to the lowest level in years, standing at 24,792,000 bus.—F. G. C.

Richland, Mont., Nov. 18.—There is still a lot of grain on the ground out in the open and still more piled in alley ways, chicken coops, barns and machine sheds that will be moved as soon as cars are available.—Farmers Union Elevator Co.

Ottawa, Ont., Nov. 11.—Shipments of Canadian grain to United States since Aug. 1, 1943, the week ended Nov. 4, totaled, in bushels: Wheat, 44,984,392; oats, 17,204,137; barley, 12,838,941; rye, 27,357; flaxseed, 3,062,304.—S. A. Cudmore, M. A., Dominion Statistician.

Grenola, Kan., Nov. 17.—We have not purchased one bushel of corn. What little has been sold has been bot by some other farmer at considerable higher price than we could pay under the ceiling. So far have been unable to ship corn in. Looks like a fine state of affairs to us.—The Grenola Mill & Elevator Co.

Ottawa, Ont., Nov. 18.—The following is a summary of cars of western Canadian grain both old and new crop, inspected by the Board of Grain Commissioners during the period Aug. 1 to Nov. 7, 1943, inclusive: Wheat, 43,413; oats, 15,394; barley, 16,316; rye, 564; flaxseed, 7,267; corn, 24.—S. A. Cudmore, Dominion Statistician.

Philadelphia, Pa.—Receipts and shipments of grain during October as compared with October, 1942, shown in parentheses, expressed in bushels were as follows: Receipts, wheat, 1,235,121 (168,265); corn, 12,412 (406,336); oats, 51,703 (16,395); barley, 10,657 (5,644); shipments, wheat, 1,508,173 (640,560); corn, 30,193 (2,962); oats, 24,257 (9,343); rye — (129); barley, 4,819 (1,019); soybeans, 1,674.—John H. Brazier, managing director, Commercial Exchange.

CCC Wheat Loans

Commodity Credit Corporation through Nov. 13, 1943, had completed 114,048 loans on 117,677,380 bus. of 1943 wheat in the amount of \$147,271,454.60. The average amount advanced was \$1.25 per bushel, which includes some transportation charges from the area of production to warehouse locations. On the same date last year 438,841 loans had been completed on 312,884,567 bus. Loans by States follow:

Loans Originated	Farm Stored (bus.)	Warehouse Stored (bus.)	Amount Advanced
Ark.		3,463	\$ 4,147.53
Calif.	155,812	199,758	462,092.43
Colo.	1,136,511	3,030,237	5,219,235.63
Del.	1,338	161,471	236,930.02
Idaho	565,138	1,110,244	1,892,782.30
Ill.	9,740	116,420	168,753.14
Ind.	84	42,908	57,834.63
Iowa	10,504	217,191	300,962.21
Kans.	4,885,286	17,651,173	29,182,572.62
Ky.		45,495	62,025.00
Md.	480	454,315	659,184.02
Mich.	3,452	2,266	7,386.11
Minn.	1,037,366	2,037,807	3,960,555.87
Mo.	3,174	122,611	164,018.14
Mont.	5,619,792	3,978,299	11,050,072.39
Nebr.	4,352,419	5,173,821	12,061,094.82
N. J.		10,656	15,975.36
N. M.	129,191	412,953	783,580.07
N. C.	756		1,081.52
N. D.	13,264,385	13,750,017	33,681,125.96
Ohio	1,567	59,266	81,445.83
Okla.	492,601	6,606,933	8,908,108.10
Ore.	1,204,250	3,763,631	6,086,905.92
Penn.	1,816	106,056	155,169.68
S. D.	1,792,095	2,750,768	5,682,921.79
Tenn.		77,380	107,498.35
Tex.	782,272	11,907,967	16,325,657.82
Utah	168,013	23,078	218,631.67
Va.	535	35,145	51,968.27
Wash.	1,329,658	5,932,412	8,517,075.63
Wyo.	391,036	554,473	1,164,560.22
Total	37,339,271	80,338,109	\$147,271,454.60
Liquidations:			
2,460	167,634	2,464,021	\$ 3,330,300.21

New York, N. Y.—Receipts and shipments of grain during October as compared with October, 1942, shown in parentheses, expressed in bushels were as follows: Receipts, wheat, 34,205 (403,982); corn, 9,199 (26,743); oats, 102,125 (91,850); barley, 30,066; flaxseed, 235,980 (897,241); shipments, wheat, 463,000 (653,000); corn, 8,000.—Dept. of Inf. & Statistics, Produce Exchange.

Portland, Ore.—Receipts of grain during October, compared with October, 1942, shown in parentheses, expressed in bushels were as follows: Wheat, 903,142 (798,329); corn, 66,450 (109,856); oats, 156,462 (123,892); rye, 4,230 (3,439); barley, 265,445 (157,015); milo, 9,853; flaxseed, 200,027 (122,169); hay, tons, 915 (463).—C. W. Wright, chief grain inspector, Dept. of Agr.

Ottawa, Ont., Nov. 13.—Stocks of Canadian wheat in store or in transit in North America at midnight Nov. 11, 1943, totaled 363,006,637 bus. This represented an increase of 3,513,274 bus. compared with the total week earlier. In Canadian positions Nov. 11 as compared with Nov. 12, 1942, shown in parentheses, were 346,890,532 bus. (433,140,838); in United States positions, 16,116,105 bus. (19,942,525).—S. A. Cudmore, Dominion Statistician.

Enid, Okla., Nov. 16.—Fairly good demand has been indicated for all car lot wheat offered for sale although premiums at times show signs of easiness. Since farmers are still not inclined to sell there has been no burdensome amounts of wheat on the market for the past two weeks. It will be noted that country elevators are allowed to sell corn purchased by them on and after Nov. 1. But still there seems to be no corn available for industry or feeders in this southwestern section. There is some hope that later on corn will be available.—E. R. Humphrey, sec'y Oklahoma Grain & Feed Dealers Ass'n.

Duluth, Minn.—For the past several weeks there has been daily boat arrivals from Canada with grain, mainly wheat with duty unpaid to be run through local elevators and reshipped to be milled in Texas and then exported to Mexico. This grain has been coming in faster than car shipments could be made, although every effort has been made to speed up loading out for rail movement and stocks are rapidly piling up in elevators with some 2,000,000 bus. in store on Nov. 18. This movement is only part of some five to six million bushels contracted to move through Duluth for ultimate Mexican use.—F. G. C.

Ottawa, Ont., Nov. 11.—The following quantities of wheat and coarse grain were delivered from farms in western Canada the week ending Nov. 4 compared with the preceding week, shown in parentheses, expressed in bushels: Wheat, 6,533,319 (4,019,960); oats, 1,842,496 (1,620,852); barley, 1,334,397 (1,503,069); rye, 12,323 (19,523); flaxseed, 224,330 (334,878); since Aug. 1 as compared with the same period a year ago: Wheat, 57,591,623 (94,804,394); oats, 39,021,559 (31,510,612); barley, 32,275,778 (31,749,729); rye, 765,337 (2,603,778); flaxseed, 12,163,051 (8,892,801).—S. A. Cudmore, M. A., statistician, Dominion Bureau of Statistics.

Decatur, Ill., Nov. 20.—Corn harvesting is now working well into the final stages. Sections where they have plenty of pickers are practically finished; in areas where machines are not so numerous and husking has to be done by hand, gathering of the crop is slower. Yields are holding up well on the average, although the final total may not quite hold up to the Illinois Nov. 1st estimate of 446,148,000 bus. Quality of corn, generally is good, although moisture content continues to run high. The crop was planted considerably later than normal and growers are marketing their corn with the highest moisture to avoid shrinkage and spoilage in cribbing. Only the surplus over crib room is coming to market which is not nearly enough to correct the feed situation.—Baldwin Elevator Co.

Movement of Flaxseed

Minneapolis, Minn., Nov. 20.—U. S. Flax Crop: Prices for domestic flax remain at the ceiling of \$3.05 f.o.b. Minneapolis and Duluth. Some crushers along the Great Lakes are short of seed for their current operations and the market is reflecting their urgent buying. Carlot receipts of flaxseed this week are as follows as compared with last week and a year ago: Minneapolis 3rd week of November 247; year ago 201.

Duluth receipts 3rd week of November 66 cars; year ago 76 cars. From the "North Dakotan" published at Fargo, we learn that the goal for flax acreage in that state in 1944 is 2,000,000 acres compared to an indicated 2,231,000 for 1943. The long period of dry weather in that state extending from the middle of September through late October has not improved prospects for next year's flax crop.

Canada: The Sanford Evans Service reports that up to Nov. 12th 3,814,000 bus. of new crop Canadian seed have moved, of which 3,572,000 were for this country. The same report calculates the 1943 flax-carryover as 3,740,000 bus., making total supplies with the 1943 crop 21,440,000 bus. So far 5,000,000 bus. of Canadian seed have been sold to this country. There are indications this week that an additional quantity will be made available soon.—Archer-Daniels-Midland Co.

The Broomcorn Crop

Nov. 1.—The production of broomcorn in Oklahoma in 1943 is estimated at 7,600 tons, according to the Nov. 1 report of the Bureau of Agricultural Economics, U. S. D. A. This is a decrease of 4,300 tons from the previous year and is considerably below the ten-year average of 12,850 tons. Colorado, with a production of 9,200 tons, replaced Oklahoma as the nation's leading broomcorn State. The broomcorn acreage reported harvested in 1943 is estimated at 56,000 acres compared with 62,000 acres in 1942 and a ten-year average of 108,000 acres. The indicated yield per acre of 270 pounds is about a third less than the 355 pounds harvested in 1942 but is slightly above the ten-year average of 252 pounds per acre. Hence, the decline in production from normal resulted primarily from the decrease in acres harvested.

Weather during September and October was nearly ideal for curing and baling of broomcorn, with the result that most of the crop has been baled and much of it has been sold. Reports on Nov. 1 confirm the yields of the preceding month, except in Texas, where an increase of 20 pounds per acre is indicated. The United States yield is now placed at 262.1 pounds per acre, compared with 330.4 pounds in 1942 and 265.2 pounds, the 10-year (1932-41) average.

Production this year is estimated at 27,800 tons, compared with 35,400 tons in 1942 and 39,700 tons for the 10-year average. The crop is smaller this year than last in Illinois, Oklahoma, Texas and New Mexico, but larger in Colorado and Kansas. Production is below the 10-year average in all producing States except Colorado, where it is twice the average.

The Illinois production in 1943 is now estimated 2,400 tons; Kansas, 2,000; Oklahoma, 7,600; Texas, 2,400; Colorado, 9,200; New Mexico, 4,200.

Reorganization of the activities of the National Safety Council's industrial safety engineering division recently has been accomplished to provide more practical and specific assistance with accident and health problems in modern industry. Each safety engineer on the staff has been appointed as staff contact man for one or more of the industrial sections.

Stocks of Soybeans

Soybeans from the crop of 1942, or earlier, remaining in all positions on and off farms Oct. 1, 1943, are reported at 12,891,000 bus. by the Crop Reporting Board of the U. S. Department of Agriculture. Included in this total are 4,763,000 bus. held in processing plants, as enumerated by the Bureau of the Census; 732,000 bus. stored at 46 terminal markets, reported by the Grain Products Branch of the Food Distribution Agency; 1,819,000 bus. reported by Commodity Credit Corporation remaining in their own steel and wooden bins; as well as 640,000 bus. in Interior Mills and Elevators and 4,987,000 bus. on farms, estimated by the Crop Reporting Board. Current stocks of old soybeans in all positions, on and off farms, are more than double the 6,000,000 bus. estimated Oct. 1, 1942.

Stocks on July 1, 1943 were 45,319,000 bus. in the same positions; disappearance since that date is thereby indicated at 32,428,000 bus. Total consumption during the July 1-Oct. 1 period by processors of vegetable oils, is reported by the Bureau of the Census at 28,667,000 bus. The difference between indicated disappearance and crushings during the 3-month period represents, in addition to those fed on farms where produced and those processed for food, the movement of soybeans into more or less unusual channels. A total of 132,572,000 bus. of soybeans had been crushed in the 12-month period ended Sept. 30, 1943. In the preceding 2-month period 77,123,000 bus. were crushed.

New soybeans are already moving into storage, but are not included in these estimates, except insofar as they may appear in the Bureau of the Census data. The following table shows stocks of old soybeans (1942 or earlier crop) in establishments covered by estimates of the Crop Reporting Board as of Oct. 1, with comparisons:

State	STOCKS OF SOYBEANS IN MILLS, ELEVATORS, WAREHOUSES ¹		
	Oct. 1, 1942	July 1, 1943	Oct. 1, 1943
	Thousand bushels		
Ohio	100	975	123
Indiana	126	1,013	156
Illinois	510	3,950	95
Michigan	24	50	50
Minnesota	27	47	15
Iowa	63	847	73
Missouri	15	133	26
North Carolina	12	5	4
10 States	880	6,995	544
Other States	48	262	96
United States	928	7,257	640

¹Excludes stocks in crushers and processing plants enumerated by the Bureau of the Census and stocks at 46 terminal markets reported by the Grain Products Branch, F. D. A.

Food Deliveries to Allies

September deliveries of food and other agricultural commodities to allied representatives totaled a little over a billion pounds. Meats, fats and oils, and sugar accounted for 63 per cent of the total. The British Empire received 75 per cent; Russia, 21 per cent; North Africa, 3 per cent; West Africa, Greece, Martinique, and Poland combined, 1 per cent. With North Africa becoming more nearly self-sufficient, largely because of allied rehabilitation measures, deliveries of food for use in that area have shown a steady decline.

Deliveries during the period from Jan. 1 through Sept. 30, inclusive, totaled 8,412,000,000 pounds or a monthly average of 935,000,000 pounds. Deliveries in August, at 1,077,000,000 pounds, were slightly above the monthly average, as were September deliveries of 1,099,000,000 pounds.

All food made available to allied representatives comes under the Food Distribution Administration's allocation procedure, which divides total food supplies of this country among civilians, U. S. armed forces, allies of the United States, and other groups.

Commodities delivered for shipment Jan. 1 to Sept. 30 inclusive, included the following grain & cereal products: barley, 10,440,187 lbs.; pearl barley, 8,010,410 lbs.; biscuits (hard-bread), 33,758,224 lbs.; buckwheat cereal, 180,000 lbs.; concentrated cereal foods, 7,082,084 lbs.; corn, 116,724,160 lbs.; corn grits, 6,719,300 lbs.; cracked wheat, 25,230,070 lbs.; flour, rye, 11,499,620 lbs.; flour, wheat, 481,917,012 lbs.; macaroni, 335,209 lbs.; malt, 2,239,273 lbs.; noodles, 12,800 lbs.; Oats, 3,932,260 lbs.; oat cereal, 23,348,147 lbs.; rice, milled, 206,505,866 lbs.; semolina, 44,899,170 lbs.; wheat, 30,653,320 lbs.; wheat cereal, 79,900 lbs.; seeds, 35,477,780 lbs.; soya beans, 47,845,920 lbs.; soya flour and grits, 111,548,932 lbs.

Open Interest in Future Deliveries

As reported by the Compliance Branch of the Food Distribution Administration the open interest in all futures on the Chicago Board of Trade recently has been as follows, in 1000 bus.:

	Wheat	Barley	Oats	Rye
June 26	37,479	.....	15,574	35,357
July 3	38,532	.....	15,600	37,189
July 10	42,676	.....	15,222	36,388
July 17	48,400	.....	16,217	38,137
July 24	50,217	.....	17,361	38,919
July 31	50,890	.....	17,990	38,179
Aug. 7	52,428	.....	17,885	38,642
Aug. 14	53,419	.....	18,991	40,890
Aug. 21	53,420	.....	19,180	40,653
Aug. 28	52,516	.....	19,437	38,354
Sept. 4	49,089	.....	20,277	37,239
Sept. 11	50,064	.....	20,316	38,088
Sept. 18	51,009	.....	18,897	39,020
Sept. 25	50,498	.....	19,186	38,206
Oct. 2	51,474	.....	19,817	38,668
Oct. 9	51,266	.....	20,264	38,638
Oct. 16	49,111	631	19,460	37,447
Oct. 23	48,097	939	19,781	40,177
Oct. 30	45,483	1,281	19,665	41,998
Nov. 6	45,229	1,493	19,233	42,991
Nov. 13	43,963	1,559	18,940	42,568
Nov. 20	41,198	1,405	17,485	42,227

Daily Closing Prices

The daily closing prices for wheat, rye, oats, and barley for December delivery at the leading markets in cents per bushel, have been as follows:

	Option		Wheat											
	High	Low	Nov. 10	Nov. 12	Nov. 13	Nov. 15	Nov. 16	Nov. 17	Nov. 18	Nov. 19	Nov. 20	Nov. 22	Nov. 23	
Chicago	163 1/2	142 3/4	157 1/4	157 1/4	157 1/4	158 1/4	159 1/4	160 1/4	160 1/4	161 1/4	162 1/4	163	162 3/4	
Minneapolis	158 1/2	136 1/2	149 1/4	150 1/4	150 1/4	151 1/4	151 1/4	153 1/4	153 1/4	153 1/4	154 1/4	155 1/4	155 1/4	
Kansas City	155 1/2	135 1/2	152 1/4	152 1/4	152 1/4	153 1/4	153 1/4	154 1/4	154 1/4	154 1/4	155 1/4	155 1/4	155 1/4	
Duluth, durum	154	137 1/2	148 1/4	148 1/4	148 1/4	149 1/4	150 1/4	152 1/4	152 1/4	152 1/4	153 1/4	153 1/4	153 1/4	
Milwaukee	163 1/2	142 3/4	157 1/4	157 1/4	157 1/4	158 1/4	159 1/4	160 1/4	160 1/4	161 1/4	162 1/4	163	162 3/4	
Chicago	118	86 1/2	111 1/4	111 1/4	111 1/4	112 1/4	112 1/4	113 1/4	113 1/4	114 1/4	115 1/4	117 1/4	117 1/4	
Minneapolis	112 1/2	83 1/2	106 1/4	106 1/4	105 3/4	107 1/4	107 1/4	108 1/4	108 1/4	109 1/4	110	112 1/4	112 1/4	
Milwaukee	118	86 1/2	111 1/4	111 1/4	111 1/4	112 1/4	112 1/4	113 1/4	113 1/4	114 1/4	115 1/4	117 1/4	117 1/4	
Winnipeg	118	87 1/2	113 1/4	114	114 1/4	115	115 1/4	115 1/4	115 1/4	116 1/4	118	117 1/4	117 1/4	
Duluth	112 1/2	100 1/2	106 1/4	106 1/4	105 3/4	107 1/4	107 1/4	108 1/4	108 1/4	109 1/4	110	112 1/4	112 1/4	
Chicago	79 1/2	59 1/2	78 1/2	78 1/2	77 3/4	78 1/2	78 1/2	78 1/2	78 1/2	78 1/2	77 3/4	78 1/2	78 1/2	
Minneapolis	76	62 1/2	75 1/2	75 1/2	75 1/2	76	76 1/2	77 1/2	76 3/4	77 1/2	76 3/4	77 1/2	77 1/2	
Milwaukee	79 1/2	60 1/2	78 1/2	78 1/2	77 3/4	78 1/2	78 1/2	79	78 1/2	78 1/2	77 3/4	78 1/2	78 1/2	
Chicago	116 1/2	95	110 1/2	110 1/2	110 1/2	110 1/2	112 1/2	112 1/2	112 1/2	113	113 1/2	114	113 1/2	
Minneapolis	123 1/2	114 1/2	117 1/2	117 1/2	117 1/2	117 1/2	118 1/2	120 1/2	119 1/2	119 1/2	120 1/2	120 1/2	118 1/2	

Quality of 1943 Soybean Crop

Receipts of soybeans inspected in October, the first month of the 1943-44 season, were nearly double those of October, 1942, and totaled 33,272 cars, inspectors' reports to the Food Distribution Administration show.

The quality of the new crop, as indicated by the October inspections, is considerably higher than that of last season, 95 per cent grading No. 2 or better compared with only 58 per cent the same month a year ago. Ninety-nine per cent of the inspections classed as Yellow in October both seasons.

Inspections of soybeans in October included the equivalent of 25 cars inspected as cargo lots, and truck receipts equivalent to about 214 cars.

Soybeans: Inspected receipts, October, 1943, in carlots. Cargo and truck receipts converted to carlots on basis of 1,500 bushels equal one carlot.

Class	Grade				October 1943
	No. 1	No. 2	No. 3	No. 4	
Yellow	23,937	7,540	1,226	185	200 33,088
Green	7	1	1	...	9
Brown	3	...	1	...	4
Black	56	43	5	...	104
Mixed	38	23	5	1	67
Total cars	24,041	7,607	1,238	186	200 33,272
Percentages	72	23	4	0	100

October 1942	...	5,445	4,494	3,010	2,377	1,708
Cars	...	32	26	18	14	10
Percentages	...	32	26	18	14	10

This indicates the marketing in October of 49,908,000 bus. or nearly 25 per cent of the 1943 crop. Evidently growers have learned the cost of leaving crop in field to be soaked by fall rains.

Chicago, Ill.—Judge Sullivan has set for Jan. 10 the trial of 16 flour milling corporations on the charge of conspiracy to set the price on family flour thruout the country.

The United States Supreme Court on Nov. 22 refused to review a decision that an employer may be compelled to produce records sought by the Wage-Hour Administration without first holding a hearing to determine whether the employer is subject to the Act.

Parity and Farm Prices

PARITY									
Date	Wheat	Corn	Oats	Rye	Barley	Soybeans	...	...	...
Jan. 15	139.7	101.4	63	113.3	97.3	152	...	...	...
Feb. 15	141.4	102.7	63.8	115.2	99	154	...	...	...
Mar. 15	142.3	103.4	64.2	115.9	99.7	155	...	...	...
Apr. 15	143.2	104.0	64.6	116.6	100.3	156	...	...	...
May 15	144.1	104.6	65.0	117.4	100.9	156.0	...	...	...
June 15	145.0	105.0	65.4	118.0	102.0	157.0	...	...	...
July 15	146.0	106.0	65.8	119.0	102.1	158.0	...	...	...
Aug. 15	146.0	106.0	65.8	119.0	102.0	158.0	...	...	...
Sept. 15	146.0	106.0	65.8	119.0	102.0	158.0	...	...	...
Oct. 15	147.0	107.0	66.2	120.0	103.0	159.0	...	...	...
FARM PRICES									
Jan. 15	117.5	88	52.5	61.3	63.3	159	...	...	...
Feb. 15	119.5	90.4	55.5	64.1	70.7	160	...	...	...
Mar. 15	122.7	94.8	58.4	68.9	74.8	165	...	...	...
Apr. 15	122.3	100.2	61.1	69.5	77.3	167	...	...	...
May 15	122.8	103.4	61.2	71.9	76.8	172.0	...	...	...
June 15	124.0	106.0	64.8	79.7	83.9	175.0	...	...	...
July 15	126.0	108.0	65.8	80.9	82.0	176.0	...	...	...
Aug. 15	127.0	109.0	65.2	83.4	82.9	168.0	...	...	...
Sept. 15	130.0	109.0	69.6	94.9	95.5	169.0	...	...	...
Oct. 15	135.0	107.0	74.4	101.0	103.0	180.0	...	...	...

Retirement of O. F. Phillips

Oscar F. Phillips, for 25 years chairman of the Board of Review of the Federal Grain Supervision, will retire Dec. 31, to the regret of his associates.

With his father he had been engaged in the business of selling blood horses to farmers in his native state, Indiana, and his plans to study law had to be abandoned at an early age after business reverses.

In grain inspection began literally at the foot of the ladder climbing into freight cars to sample grain for the Minnesota State Railroad and Warehouse Commission in 1904 at the age of 28. Later the Commission named him special agent to visit the country elevators in the state.

He was appointed a grain supervisor in 1917 and took charge of the Cincinnati district. A year later he was transferred to Chicago as supervisor in charge of the Great Lakes Division, and in November, 1918, was named chairman of the Board of Review then established.

By its very nature, the chairman of the Board of Review must inevitably meet the impact of controversial subjects, both within and outside the Department. In those cases in which other officers of the Department or representatives of the public have disagreed with Mr. Phillips' interpretation of the official standards for grain, his judgment and unwavering adherence to duty have never been questioned.

The health of Mrs. Phillips demanding a warmer winter climate, he is planning to reside at Lake Worth, Florida, returning to his summer resort West Shore Park at Diamond Lake, Mundelein, Ill., to enjoy his hobby of gardening.

One son is a major in the Army and another is a captain in the American Air Lines. He himself saw service in the Spanish-American war in the 158th Indiana Volunteers.

Instead of wheat five more eastern distilleries will turn to molasses in November to save about 68,000,000 bus. of wheat per year.



O. F. Phillips, Chicago, Ill., Retiring Chairman, Board of Review

Patents Granted

Since last published in the Journals

2,328,170. Screening Mill. Chas. F. and Herman D. Schutte, Snyder, N. Y. A semi-cylindrical screen member formed of elastic material to have a natural set in a curvature of a radius greater than the radius of rotor orbit.

2,331,720. Grain Drying Apparatus. Arthur B. Osgood, Minneapolis, Minn. A vertical grain chamber has an air trunk on one side and an air plenum chamber on the opposite side, the air being blown thru the stream of grain from the plenum chamber which contains a cyclone dust collector.

2,322,414. Venturi Dust Collector. Wm. S. Bowen, Westfield, N. J. Separating and collecting mechanism comprising a first chamber thru which a stream of particle laden fluid is adapted to flow, a receiving chamber to receive the separated fluid and particles, means to establish a substantially smooth lamellar flow in the first chamber beyond the separating means in the direction of flow.

2,322,485. Elevator. Harry L. Strube, Philadelphia, Pa., assignor to Link Belt Co., Chicago, Ill. A transmission chain, and a plurality of flights spaced along said chain and individually attached to the links to project from only one side thereof, all of said flights being shaped to provide exterior material moving surfaces having vertexes which are aligned in the direction of travel of the flights.

2,327,698. Poultry Feed. (No cut.) Jos. W. Creely, Oaklyn, and John A. Levering, Haddonfield, N. J., assignors to Eavenson & Levering Co. A poultry feed containing from 0.5% to 12% of short wool fibers obtained as waste fibers in a process of wool manufacture having an average length of not over .25-inch, mixed with conventional feeding ingredients principally of vegetable origin.

2,328,025. Producing Yeast of High Vitamin B Potency. (No cut.) Morris W. Mead, Jr., Bloomfield, and John Lee, Nutley, assignors of one-half to Hoffmann-LaRoche, Inc., Nutley, N. J. In a process for producing yeast possessing high vitamin B₁ potency, the step comprising adding to the wort in which the yeast is being propagated, a substance having a stated chemical structure, including a halide radical and an acyl radical.

2,332,780. Screen Cleaner. Methodius C. Cecka, Lockport, assignor to Richmond Mfg. Co., Lockport, N. Y. A cleaner for screen comprising a free solid sphere of soft, resilient, rubbery material arranged loosely in said space and a weight of lead completely embedded in and enclosed by said sphere thereby to prevent weight from dropping out and passing on in the processing to cause damage to other machinery following the screen.

2,331,807. Poultry Grit. (No cut.) Vincent H. Shea, Nashua, N. H., assignor to Allied Minerals, Inc., Westford, Mass. A poultry grit comprising stone particles substantially insoluble in dilute hydrochloric acid and calcareous particles slowly soluble in dilute hydrochloric acid, both types of particles having a coating of a calcium compound in a form which is more readily soluble in dilute hydrochloric acid than either of said types of particles.

2,332,438. Automatic Weighing Machine. John P. Clifford, Passaic, assignor to Richardson Scale Co., Clifton, N. J. Main and auxiliary weigh beams conjointly supporting the container, the auxiliary beam being mounted pivotally on the main beam to balance thereon, means governed by the main beam and controlling the feeding means to weigh material into the container, and means governed by the auxiliary beam and controlling the discharging means to weigh material out of the container.

2,322,090. Bag Filling Apparatus. Albert C. Hobbie, Moorestown, assignor to International Pulverizing Corporation, Moorestown, N. J. A container holder comprising a vertically disposed bulk goods delivery spout, a horizontally disposed, rigid supporting member about said spout, a horizontally disposed, flat, ring-like member of internal diameter greater than that of the spout dependent from said rigid supporting member, and spaced therefrom, a rigid, vertically walled ring concentric with the spout.

2,332,729. Portable Grain Conveyor. Chas. H. Klosterman, Elkton, S. D. Aligned sprockets are keyed to the central portions of the shafts, an endless conveyor chain trained over the sprockets, laterally extending blades secured to the conveyor chain at their central portions and having their ends slidably engaging the rails on their downward movement and their outer surfaces slidably engaging the bottom side of the chute on their upward movement, a cover disposed over the elongated opening in the chute, a hinge securing the upper end of the cover to the top side of the chute, a motor adjustably mounted over the top of the chute adjacent its discharge end.

2,314,706. Grain Grinder Gate Valve. Howard M. Johnston, Toronto, assignor to Massey-Harris Co., Toronto, Ont. A hopper has at its bottom a uniform for its length horizontally arranged generally circular in cross section chamber, one end being open forming an outlet, a rotatably mounted member extending concentrically and longitudinally thru chamber, a grinding plate concentrically positioned with chamber and partially contacting the forward end of hopper.

2,324,800. Purification of Riboflavin. (No cut.) Richard Pasternack, Brooklyn, and Ellis V. Brown, Cold Spring Harbor, N. Y., assignors to Chas. Pfizer & Co., Brooklyn, N. Y. Process of purifying crude riboflavin comprising dissolving the riboflavin in an aqueous acid solution prepared by diluting a member of the group consisting of commercial concentrated hydrochloric, sulfuric, nitric and phosphoric acids with not more than two volumes of water, oxidizing the impurities at a temperature below 100° C.

2,329,403. Cleaning Grain. Leland H. Logue, Denver, assignor to Mining Process & Patent Co., Denver, Colo. In a process of separating grain kernels from the outer skins of their natural formation, the steps of treating cereal grain in an aqueous carrier vehicle, initially subjecting the immersed grain to attrition in a tumbling action for an interval sufficient to loosen the outer skins and differentially wet the grain kernels and said skins, subjecting said skins after loosening to the influence of a dispersing reagent.

2,330,642. Grain Conveyor and Storage Tank. Wm. R. Tuttle, Elma, Wash. An inclined conveyor for gravital flow of grain, a loading platform at the upper end of the conveyor, a plurality of receiving bins at the lower end of the conveyor, an element movable longitudinally of the conveyor under the influence of the moving grain, a stop at the lower end of the conveyor to be engaged by the element to temporarily stop the flow of grain, and a chute at the lower end of the conveyor movable for co-operation with any selected bin.

2,329,969. Grain Weighing and Receiving Unit. August P. Winter, St. Vital, Man. A rectangular rigid foundation frame, a pair of main levers having the ends thereof crossing the sides of the frame, means supporting the ends of the levers from the sides of the frame and embodying dual pivots permitting of a rocking movement of the levers around their geometric longitudinal axes and of a vertical tilting movement of the levers in respect to the frame, pairs of load, pivot carrying, supports carried by the levers and having the pivots thereof inwardly and laterally offset.

2,325,654. Corn Sheller. Irvin E. Borchers, Lafayette, Ind., assignor to DeKalb Agricultural Ass'n, DeKalb, Ill. The sheller comprises two horizontally extending relatively movable hollow cone-shaped members, one within the ears of a space between them, into which the ears of corn are received, a closing end wall at one end of said cone-shaped members for closing the end of the space between them, a side feed opening in said wall for feeding the ears of corn into the space between cone-shaped members, a horizontal shaft to which the inner member is connected, continuous non-metallic flexible projections on said members extending longitudinally therealong and converging toward shaft.

2,332,548. Riboflavin Preparation. (No cut.) Morris E. Auerbach, Albany, assignor to Winthrop Chemical Co., New York, N. Y. A double salt of an alkali metal borate and an alkali metal salt of riboflavin.

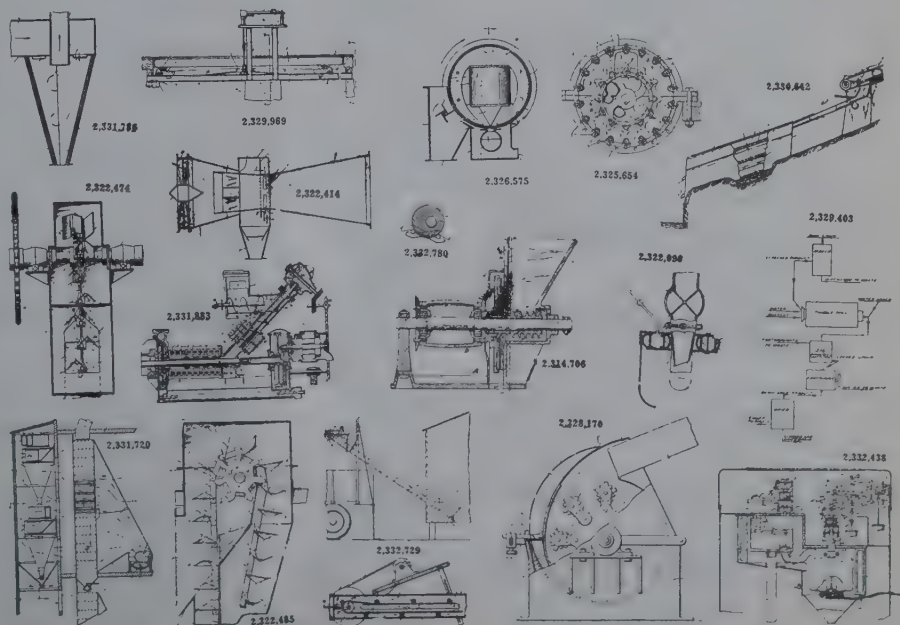
2,331,883. Expeller Press. Raymond T. Anderson, Berea, assignor to the V. D. Anderson Co., Cleveland, O. Means are arranged to compel the screw to exert increasing pressure upon the material and maintain it compressed as it travels thru the press, thereby to express liquid from the material, the axes of the screws of said elements being inclined to each other and intersecting at an obtuse angle, whereby a component of the material advancing and compressing force of the rotating screw operative in one element supplements the like force of the rotating screw in the succeeding element.

2,331,786. Dust Collector. Roland L. Lincoln, Dedham, assignor to B. F. Sturtevant Co., Boston, Mass. A converging inner wall forms a substantially conical flow passage extending downwardly within said casing below said means and receiving rotating gas therefrom, said wall having a plurality of downwardly extending, tangentially disposed skimming channels formed therein, and a gas outlet tube extending thru the upper portion of said casing into the space within said flow passage, said casing having converging outer walls extending completely around and spaced from said inner wall.

2,326,575. Magnetic Separator. Roswell H. Stearns, Wauwatosa, assignor to Stearns Magnetic Mfg. Co., Milwaukee, Wis. A rotating drum of non magnetic material has a layer of magnetic wire wound thereon in successive convolutions without spacing, tightly on the outer side of drum, which convolutions approximately lie in planes substantially at right angles to the axis of the drum, an electromagnet located within drum and having pole tips adjacent each other and closely adjacent the inner periphery of the drum and providing a gap between the pole tips extending substantially parallel to the axis of the drum.

2,322,474. Elevator. Wm. W. Sayers, Chicago, assignor to Link-Belt Co., Chicago, Ill. A flexible transmission member, and a series of flights spaced along said member and attached thereto to project from only one side thereof, the adjacent flights of said series being arranged so as to only partially overlap in the direction of travel of the transmission member, each of said flights having its entire exterior material moving surface formed of two portions which are angularly arranged with respect to each other, each one of said flights of the series having one surface portion which is inclined with respect to the direction of travel of the flights.

Unless ceiling prices are established on hard winter wheat, higher prices are probable during the winter. Regardless of how the price squeeze on millers is adjusted, it seems probable that ceilings will not be placed on winter wheat at less than parity. On the other hand, it seems quite certain that, by a ceiling or other means, wheat prices will not be allowed to rise much above parity.—Kansas College of Agriculture.



Grain Carriers

Abandonment of 59 miles of road between Morocco and Veedersburg, Ind., is asked by the Chicago, Attica & Southern.

The Interstate Commerce Commission on Nov. 8 suspended freight rate increases averaging 3 per cent, from Jan. 1 to July 1, 1944.

Railroads are now moving nearly twice as many revenue ton-miles of freight as they did in the corresponding period of the first World War.

Export grain unloaded at the ports in October totaled 2,285 cars, compared with 2,540 in October, 1942, or a decrease of 10 per cent, as reported by the Ass'n of American Railroads.

Of the total number of cars on order on Nov. 1, this year, there were 10,448 plain box, 3,025 automobile box, 4,980 gondolas, 12,824 hoppers, 1,200 refrigerator, 200 stock, and 1,415 flat cars.

The Baltimore & Ohio R.R. Co.'s supplement No. 49 to Tariff No. H 2500-G, effective Dec. 8, provides changes in routing in connection with rates on grain and grain products from Aviston to Chicago, Ill.

Washington, D. C.—A senate subcommittee on Nov. 18 approved the Truman resolution proposing that Congress override Fred M. Vinson, economic stabilization director, and go on record in favor of an 8-cents-an-hour wage increase for 1,100,000 non-operating railroad employees.

At the request of Congressman Wheat a bill was introduced in the House last week by Congressman Howell to amend the National Transportation Act by declaring a national policy in the matter and calling for the delivery of cars without the addition of the so-called spotting charge.

The United States Supreme Court on Nov. 22 ruled that a railroad may not sue a shipper for freight charges after expiration of the three-year period allowed by statute, when the shipper had entered into an agreement to waive this time limitation. The unanimous opinion, delivered by Justice Rutledge, involved a suit by the Pennsylvania Railroad Co. against the Mid-State Horticultural Co., Inc., of Fresno, Cal.

Chicago, Ill.—The millers committee on transportation, meeting here Nov. 12 was told by J. A. Winters of the W.F.A. that a 10 per cent reduction in ton miles of grain products is urgently needed. Elimination of back-hauling and cross-hauling was stressed by Mr. Winters. The committee agrees to make a survey to determine what can be done. The chairman is R. W. Goodell, pres. of the Commander-Larabee Milling Co., Minneapolis, Minn.

Loading of revenue freight for the week ended Nov. 13, 1943, totaled 847,683 cars, the Association of American Railroads announced. Grain and grain products loading totaled 51,995 cars, a decrease of 4,433 cars below the preceding week, but an increase of 10,655 cars above the corresponding week in 1942. In the Western Districts alone, grain and grain products loading for the week of Nov. 13, totaled 33,777 cars, a decrease of 3,454 cars below the preceding week but an increase of 6,524 cars above the corresponding week in 1942.

The Supreme Court of the United States on Nov. 22 agreed to review a decision setting aside on ICC order which required railroads to impose a switching charge against the A. E. Staley Mfg. Co. of Decatur, Ill. Several railroads proposed cancellation of the \$2.50 a car charge because such service was rendered without charge to neighboring, competitive industrial plants. The ICC held that the switching was a plant service, and should not be done gratis. A three-judge Federal Courts for Southern Illinois reversed the ICC ruling.

Buffalo, N. Y.—With Buffalo elevators filling up rapidly, grain interests sought to have the Office of Defense Transportation allocate as many ships as possible to the winter storage fleet to be tied up in Buffalo Harbor and to have railroads provide sufficient cars to keep grain moving out of the elevators. Several grain laden barges have tied up for the winter.—G. E. T.

Minneapolis, Minn.—The Minneapolis Grain Commission Merchants Ass'n has petitioned for a vacation of Service Order No. 160 discontinuing the privilege of holding grain cars while en route to Minneapolis or Duluth, at sampling points. With few exceptions cars billed to "sampling points" are reconsigned on the day that the inspection is made at the terminal or within the "free-time." The greatest car delay is in the line-haul movement of the railroads and at the congested terminals where delays occur because of the heavy volume of traffic now moving and limited man-power.

Up to midnight Nov. 16, 17,000,000 bus. of grain had been moved on the Great Lakes since Nov. 1, the Office of Defense Transportation announced Nov. 17. This performance by Lakes carriers exceeded the 15,000,000-bus. O.D.T. goal for the first half of the month, and brought the cumulative grain movement for the season to more than 128,000,000 bus. This mid-November total also brought the amount of grain moved under quota, as prescribed by the War Production Board, to within 32,000,000 bus. of the 135,000,000-bus. season quota. Not all grain moved on the Lakes is credited toward the quota.

Chicago, Ill.—The proposed increase in the freight rate on defluorinated rock phosphate, scheduled for hearing Nov. 17 by the Consolidated Classification Committee, is being vigorously opposed by the mixed feed manufacturers. Gladwin Read, manager of the feed department of one firm says "This proposal would result in freight rate increases on shipment from our plants ranging from 84% to nearly 250%, depending upon the territory in which the movement takes place and the length of the rail haul involved. It is certain that these increased freight rates would result in increased costs to the ultimate buyer and would make this essential raw material bear an unreasonable portion of its share of freight rate expense of those materials going into the manufacture of feeds."

Usurpation by O.P.A.

A special investigating committee of the House of Representatives on Nov. 15 presented a 30-page report on the O.P.A. declaring the O.P.A. has abused its powers, violated the Constitution and set up its own "surprisingly complete criminal code," and has misused price ceilings to control business profits.

By an "unwarranted and unlawful bureaucratic grab of power," the report said, O.P.A. has taken unto itself the power thru suspension orders to put merchants out of business for long periods. This amounts to taking property without due process of law, it added.

"Suspension orders directed against retail merchants," the report states, "invariably require the merchant during the period of the suspension to display his 'guilt' to the public at large in the same fashion as convicts in medieval times were branded or mutilated for the purpose of drawing public ridicule and contempt."

What Is It?

FARMER: What is a buccaneer?

BUYER: A buccaneer is an awful price to pay for corn.

James F. Byrnes, Director of War Mobilization, Nov. 13, urged a reinvigorated drive to conserve and salvage paper. "The war needs for paper and paperboard are greater than our present ability to produce. We need to curtail all unnecessary uses, and to make sure all waste paper is saved for the Government Salvage Drive."

Grain Shipping Books

Railroad Claim Blanks duplicating, three different books, five forms, 8½x11 in., \$2.25 each book, plus postage.

Shipping Notices duplicating, 50 originals of bond paper, 50 duplicates, press board cover, 5½x8½ inches, weight 8 ozs.; 2 sheets of carbon. Order 3SN. Single copy 75 cts.; three copies \$2.00, plus postage.

Shippers' Certificate of Weight duplicating, 75 originals of bond paper, 75 duplicates. Press board hinged back covers, three sheets of carbon, 4½x9¾ inches, weight 11 ozs. Order 89SWC. Single copy \$1.00; three copies \$2.75, plus postage.

Grain Shipping Ledger for keeping a complete record of 4,000 carloads. Facing pages are given to each firm to whom you ship and account is indexed. Book contains 80 double pages of ledger paper with 16-page index, size 10½x15¾ inches, well bound with black cloth covers and keratol back and corners. Weight, 4 lbs. Order Form 24. Price, \$3.85, plus postage.

Shippers Record Book is designed to save labor in handling grain shipping accounts and provides for a complete record of each car shipped. Its 80 double pages of ledger paper, size 9¾x12 inches, provide spaces for 2,320 carloads. Wide columns provide for the complete record of all important facts of each shipment. Bound in heavy black cloth with keratol back and corners. Shipping weight, 2½ lbs. Order Form 20. Price \$2.75 plus postage.

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Grain & Feed Journals

CONSOLIDATED

327 South La Salle St., Chicago, Ill.

Grain and Feed Trade News

Reports of new elevators, feed mills, improvements; changes in firms; fires, casualties, accidents and deaths are solicited.

ARKANSAS

Little Rock, Ark.—A. M. Saunders, 68, former feed and flour broker here for a number of years, died unexpectedly the night of Nov. 5 while at his horse barn on the Hot Springs highway.—P. J. P.

CALIFORNIA

Petaluma, Cal.—Fire that burned thru the roof of the elevator at the Petaluma Milling Co. plant recently was extinguished before it had gained headway. The loss was small.

Sacramento, Cal.—The Harelson Feed Store burned recently, the fire started by spontaneous combustion. A quantity of grain and hay in the structure, destroyed, was covered by insurance. There was no insurance on the building. Charles A. Harelson operated the store.

Knights Landing, Cal.—The grain elevator and rice drier being constructed by the Sutter Basin Growers Co-operative between the old and new bridges which span the Sacramento River is practically completed. Rice drying already has started in the plant. Built at a cost of \$360,000, of solid concrete and steel on high ground, the plant is one of the largest in the state. The plant covers a ground space of 205 ft. long by 66 ft. wide and is available to the Southern Pacific rail line, river steamers or highway. In the working house section are the elevators, two driers, 18 receiving and tempering bins, the operating machinery and the cleaning, sacking and automatic weighing machinery. In the main tower, which is 115 ft. high, a workers' elevator has been installed. Bins yet to be built will have a capacity of 200,000 bags of rice. Storage will be in bulk. The Sutter Basin growers are transforming their harvesting and trucking equipment to handle their rice in bulk without sacking. They estimate that the saving soon will pay for the plant. W. McWilliams is plant manager. Edward von Geldern designed the plant and is supervising its construction. The Jones-Hettelsater Const. Co. has the construction contract.

CANADA

St. John, N. B.—The Reliance Grain Co. has declared a dividend of 1½ per cent on preferred shares for the quarter up to March 1, 1939, payable Dec. 15 to holders of record, Nov. 30.—W. McN.

Toronto, Ont.—J. Gordon Davidson recently was appointed feeds administrator for Canada, succeeding F. W. Presant, who resigned to resume his former position as manager of the feed department of Toronto Elevators, Ltd. In 1941 Mr. Presant was lent to Ottawa by his employers to head the administration of wartime control of feeds. Mr. Davidson also joined the feed administration in 1941 and has served as its director in Quebec and the maritime provinces.

St. John, N. B.—Cars are available for feed grain shipments from the western to the eastern provinces where the feed is for use on farms or for sale by the eastern farmers to relatives on farms. Freight aid and other related subsidies may be claimed against such shipments by the farmer doing the purchasing, in event of him buying the grain direct from the western grower. For the subsidies, the liaison agency between the buyer and the seller is the Feed Administrator, Ottawa.—W. McN.

Montreal, Ont.—D. I. Walker, pres. of the Western Canada Flour Mills Co., reports a record volume output of flour and commercial feeds. For some time, all the plants of the company have been functioning on a 24-hour day basis. Mr. Walker states that export sales continue on a heavy scale and that there are large unfilled orders awaiting future delivery overseas. The company has purchased on favorable terms, the minority holding of P. G. Bussiere Co. Operating profit of the company for the year, including all but one subsidiary, the Purity Baking Co., was reported at \$1,235,863, as compared to \$720,370, for the preceding year. Net profit, after taxes and depreciation, is revealed as \$308,709. The profit equals \$12.79 per share on 24,130 shares of 6½ per cent cumulative preferred stock, with par of \$100. And, on which there were \$62.58 in dividend arrears.—W. McN.

COLORADO

Limon, Colo.—The Farmers Grain & Bean Ass'n sustained a small fire damage on Oct. 23, the fire caused by a discarded burning cigarette.

Las Animas, Colo.—The newly organized Farmers Co-operative has purchased the old Hoco building on North Bent Ave., and will carry on its business there, buying and selling grain and selling seed.

Longmont, Colo.—V. E. Wikstrand, manager of the Golden West Milling Co., announced recently a new contract had been signed with local mill employees embodying a wage scale comparable to that in effect in many defense industries, and enabling the mill to compete effectively with such industries for needed manpower. The agreement is effective until next June, and retroactive to June of this year. By the scale of wages effective, among others, warehousemen and elevator men receive 75c per hour.

ILLINOIS

Greenview, Ill.—Fire caused by slipping V-belts did some small damage in the Allison & Co. elevator recently.

Hazelhurst, Ill.—Milton Gayman, farmer and cattle breeder, has purchased the feed mill owned and operated by Ben Duffey for many years.

Oakland, Ill.—The Kite Milling Co. building and machinery has been purchased by Mr. Acord of Kansas, Ill. Arch Babb has been placed in charge as local manager.

Rushville, Ill.—The Rushville Farmers Grain & Livestock Co. reports the year just closed to be the best year's business in the 24 years it had been in operation. Total sales reported by the manager, William Eifert were \$321,080.98, for a new high record. The net operating income amounted to \$8,048.06, which, together with other income from interest, rent and dividends, have a net income of \$9,388.38.—P. J. P.

Pana, Ill.—The Shellabarger Elvtr. Co.'s soybean mill has started operation. The first high fat soybean flour has been milled Thomas Polk, local manager, announced. Processing of locally raised soybeans is expected to continue at the rate of about 1,000 bus. a day, later to be increased when the mill starts production of soybean oil. Construction of the mill began about eight months ago. It is hoped the final installations of machinery will be completed early in December, and that the mill will be in full operation before January. Entire output of the mill will go to the government.

Colchester, Ill.—The Colchester Milling Co. is constructing a building east of the mill to house soybean processing machinery.

Shobonier, Ill.—John H. Metzger, 84, retired, for many years in the hay, grain and livestock business here, died Oct. 22.—P. J. P.

Warsaw, Ill.—The Farmers Grain & Supply Co. has received final shipment for material for completing the barge loading conveyor over the T. P. & W. Railroad tracks to the river. It is expected to have the conveyor ready for use by the time navigation opens next spring.

Bement, Ill.—The Bement Grain Co. has taken on the distribution of the Corn King line of mineral feeds, sanitation products, such as dry dips, stock dips, fly sprays, and poultry remedies. They will deliver to all the surrounding territory. L. J. Forcum, is their merchandise representative in the territory.—J. R. O.

Kewanee, Ill.—William Bernard Cavanaugh, 70, operator of W. B. Cavanaugh elevator for the past 32 years, died Nov. 4 at his home. He had been in poor health of late, but had conducted his business as usual on the day of his death. Before coming here Mr. Cavanaugh conducted a grain elevator business in Bradford.

Quincy, Ill.—Dust from beans in the exhaust pipe that carries the dust from the bins at the Quincy Soybean Products Co. plant, recently became ignited. Firemen summoned had to chop holes in the pipe, which extends from basement to the third floor, to get at the fire. No beans were damaged and operations at the plant were not interfered with.—P. J. P.

LaFayette, Ill.—The Wrigley Grain & Lumber Co., of Toulon, has purchased the LaFayette Co-operative Elvtr. Co., effective Dec. 1. The two elevators will be operated as at present, but under single ownership. The transaction includes the elevator, lumber yard, coal yard and stock. The Wrigley company is owned by S. M. Wrigley, in active management, and his mother, Mrs. J. H. Wrigley. Following transfer of the LaFayette elevator to the new owners, T. H. Griggs, who has been employed at the company's Toulon elevator for several years, will be in active management of the local business.

Ottawa, Ill.—The 100,000-bu. elevator recently completed by Cargill, Inc., is open for business. J. H. Cunningham, with 23 years experience in the grain business, is manager. Grain is bought for shipment by water from other elevators, not direct from the farmer. Facilities in the new elevator, located on State Highway 71 southwest of Ottawa, include a 10,000-bu.-per-hour elevator leg for the unloading of grain. Speedy handling of trucks is assured by modern equipment installed for the purpose. The 106 ft. high storage tanks are topped by a 23 ft. high cupola giving the elevator an over-all height of 129 ft.

Sesser, Ill.—William Hannis, 35, local feed store proprietor, was shot and killed by Silas Rushing, 73, the night of Nov. 1 while delivering feed to the Rushing home. He had placed one sack of feed on the porch of the Rushing home and was walking toward the house with another when Rushing stepped onto the porch and opened fire with a revolver, witness to the tragedy reported. Rushing, who is held on a murder charge, is reported to have told neighbors recently that he feared an attempt would be made to rob him. Following the shooting he barricaded himself in his home and resisted arrest, officers finally routing him with tear gas.—P. J. P.

Sullivan, Ill.—The east elevator of the Sullivan Grain Co. was damaged by fire recently, that started when fire from burning cobs in the outdoor burner, traveled up the metal chute, setting fire to a sack stuffed in the upper end of the chute. The burning sack fell on top of a bin containing several thousand bushels of wheat, setting fire to the wheat. The blaze was discovered before much damage was done, and the burning wheat was shoveled out of the bin.

CHICAGO NOTES

Harry Hanson succeeds Lou Ambler, Jr., as elevator superintendent of The Glidden Co., soybean processors, effective Nov. 22. Mr. Ambler, a veteran of eight years with the company, joins the Richardson Scale Co.'s Chicago office staff. Mr. Hanson formerly was assistant superintendent.

Voting by non-resident members at the annual Board of Trade election would be permitted under amendments to the rules being balloted upon Nov. 24. A non-resident member is defined as one residing more than 50 miles from the Cook County courthouse; and they would not vote on commissions or brokerage.

G. C. Whipple, Quaker Oats Co., has been appointed by the O.P.A. as a member of the Exporters' Industry Advisory Com'te. Composed of 19 exporting manufacturers, merchants and agents from various ports and business centers of the country, the com'te will work with O.P.A. in a consulting capacity on pricing and sales problems affecting the industry. The formal organization meeting was held in Washington, D. C., on Nov. 17.

At a ballot vote Nov. 18 the rules of the Chicago Board of Trade pertaining to barley differentials were amended with respect to the classes of barley which can be delivered on a futures contract. The essential change in the newly adopted rule is that No. 3 class has been eliminated entirely, leaving No. 1 and No. 2 barley of Class 1 and No. 1 and No. 2 malting barley deliverable at contract price, and No. 3 barley of Class 1 deliverable at a discount of 2c per bushel under the contract price.

INDIANA

Oaktown, Ind.—The Carlisle Mill & Elevator of Carlisle, Inc., has leased the Clodfelder Elevator from the new owner, Paul Thompson, formerly of Clinton, Ind., and George Gettinger, member of the firm, has taken charge of the local business.

Seymour, Ind.—John Green, 69, a miller at the Farmers' Elevator for many years, died recently.—W. B. C.

Lebanon, Ind.—We have just installed a new Gruendler Hammer Mill, latest model.—Boone Grain, Feed & Seed Co., Inc.

South Whitley, Ind.—Clyde C. Butt, formerly of Denver, Ind., where he operated a service station, is new manager of the Mayer Grain Co. elevator.

Indianapolis, Ind.—Orie Torr Powell, 55, foreman of the elevator at the Acme-Evans Co., died Nov. 8 in Methodist Hospital of injuries suffered when he fell at work several weeks ago.—P. J. P.

Lawrenceburg, Ind.—The Lawrenceburg Terminal Elvtr. Corp. has installed new feed grinding equipment in its new feed mill which will enable the company to manufacture three carloads of ground feed per day.

Greenwood, Ind.—In a burglary Nov. 14 at the Hoosier Mineral Feed Co., two safes, weighing more than 3,000 lbs., were removed, carried several miles, broken open and robbed of more than \$250 in cash.—P. J. P.

Fairmount, Ind.—Plans for rebuilding the Fairmount Grain Co. elevator are being made, depending on ability to secure necessary materials, following the fire that destroyed the structure and its contents the night of Nov. 2. Mrs. Della Naber, owner of the elevator, stated. Meanwhile feed grinding and mixing has been resumed in a brick building opposite the elevator. This arrangement will continue until the former elevator is rebuilt, Mrs. Naber said.

IOWA

Lynnville, Ia.—The Farmers Elvtr. Co. has been dissolved.

Harlan, Ia.—Harry Anderson, employed at the grain elevator, suffered a stroke of paralysis Nov. 6.

Nashua, Ia.—The Nashua Grain & Milling Co. has been incorporated by Howard L., James L., and E. A. Roach, for \$35,000.

Belmond, Ia.—Farmers Grain Co. is building an addition to its feed grinding building and also installing a new feed grinder.

Parkersburg, Ia.—Urias W. Kitzmiller, 93, for many years engaged in the grain and elevator business here, died recently in the Western (Evangelical) Old People's Home at Cedar Falls.

Bradegate, Ia.—The Farmers Elvtr. Co. recently installed a 10x40 ft. 30-ton concrete deck scale, Smith Construction Co. having the contract.

Humboldt, Ia.—A steel bin containing 12,000 bus. of shelled corn at the J. F. Miller elevator collapsed Nov. 13. Most of the corn was salvaged.

Plymouth, Ia.—Ed Wyborney, Jr., employed at the Farmers Elevator, underwent an emergency appendectomy in a Mason City hospital recently.

Clarion, Ia.—The Clarion Mill has been purchased by E. L. Williams of Fort Dodge. L. L. Dixon, who has been manager for the past year, has been retained as manager.

Plymouth, Ia.—Mr. Tabbert of Grafton has been named manager of the Farmers Co-op. Elevator, succeeding Charles Molsberry who has been manager for several years.

Davenport, Ia.—Charles W. Bovard, who has been Chamber of Commerce grain inspector at Burlington, Ia., for 20 years, has taken a similar position here, effective Nov. 1.

Iowa Falls, Ia.—Pvt. Walter Weddle, son of John Weddle, manager of the Farmers Co-op. Co., recently arrived in Australia, according to word his Dad received.—A. G. T.

Marshalltown, Ia.—Alden K. Thomas, 78, retired sec'y of the Quaker Oats Co., died recently, following an operation at a local hospital. He came here from Chicago three years ago.

Fredericksburg, Ia.—The Fredericksburg Grain & Milling Co. has been incorporated for \$35,000; officers, Howard L., James L., and E. A. Roach, brothers. Clark Stufflebeam will be manager of the company's local plant.

Lynnville, Ia.—Verne Wehrle, manager of Taintor (Ia.) Co-op. Co., recently purchased the Farmers Elevator Co. at Lynnville. The business will be known as the Lynnville Elvtr. Co. and managed by Edw. Northcutt.—Art Torkelson.

Hawarden, Ia.—John Wilkison and Ben Magness, in partnership, have purchased the former Cambier Motor Co. building from J. F. Christiansen of Shenandoah, and will convert the building for handling feed and produce on a large scale.

Des Moines, Ia.—Carroll Swanson of the Iowa Feed Co. was named president of the Des Moines Feed, Flour & Seed Club at a recent meeting held at the East Des Moines Club. Don Jorgensen of the Inland Milling Co. was named sec'y for the coming year.

Correctionville, Ia.—Melvin Dorr of Marcus has purchased the R. L. Madison Grain Co. elevator and will operate it, specializing in the production of Dorr Feeds. The local plant is in charge of D. W. Drefke of Marcus. Mr. Dorr's main plant is located at Marcus.

Bridgewater, Ia.—The F. D. Gipple elevator was threatened by fire Nov. 3 when an overheated stovepipe started a blaze in the ceiling and upper wall of the office building. The blaze was discovered before it had gained any headway, and was kept under control until arrival of the fire department.

Belmond, Ia.—Work of conversion of the American Crystal Sugar Co. plant recently purchased by General Mills, Inc., into a soybean processing plant will start immediately, engineers to be brought here to supervise the new construction. Personnel managing the affairs of the sugar company will be retained by the General Mills Co., Inc., W. E. Flumerfelt stated.

Des Moines, Ia.—The Community Elevator, Inc., has been organized, with offices in the Fleming Bldg. Officers of the new company are: W. C. Fuller, pres.; A. D. Kent, vice-pres.; Carl F. Swanson, sec'y-treas. The new firm has bought eleven elevators that have a total capacity of 250,000 bus. from the Des Moines Elvtr. Co., Des Moines, of which W. C. Fuller is president. Elevators purchased are at Portsmouth, Hancock, Redfield, Runnels, Melcher, Cummings and Ryer.



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Goodell, Ia. — The Hubbard Grain Co. has completed an addition to its grain elevator, increasing the storage by 14,000 bus.

Parkersburg, Ia.—Robt. T. Froning, 31, who operated the Froning Elevator, died from a heart attack while out with his young son on Nov. 7, hunting pheasants. He is survived by his wife and 4 children, his father, A. J. Froning of Parkersburg, two brothers, Lon and Al, who are operating the Froning Elevator at LaPorte City, and two sisters who are married to grain men.—A. G. T.

Keokuk, Ia.—Eugene Farrell has been appointed superintendent of the Purity Oats unit of General Mills, Inc. Mr. Farrell has been with General Mills since 1935, coming here from Louisville, Ky., where he was superintendent of the company's plant there. The Purity Oats unit recently obtained a contract for manufacturing dried soup of the Russian Borsch type for lend-lease.—A. G. T.

Cherokee, Ia.—Ray B. France will remodel the former Boughton Elevator, which he recently purchased. The \$9,000 building program calls for tearing out the south wing of the structure, remodeling the rest, and building a structure 80 x 20 ft. on one end and 80 x 26 on the other. Construction is of steel, for which priority has been obtained. Mr. France is proprietor of France's Cherokee Hatchery.

Council Bluffs, Ia.—Walter Kreiger, 42, a laborer at the Omaha Elvtr. Co.'s elevator at Eighteenth Ave. and Twenty-third St., suffered a broken jaw, injuries to his chest and back and cuts and bruises Nov. 10 while opening a grain door of a moving freight car. He was using a car ram, a timber with a steel prong on one end, when the ram broke loose from the door and recoiled, striking Kreiger in the jaw.

Humboldt, Ia.—The Alfalfa Milling Co., newly organized, has taken over the site of the old Big Gain Co., water mill on the east bank of the Des Moines River, and has constructed there an electrically operated plant. Ray K. Miner of Dakota City, Ia., president of the company, is manager. B. B. Watson is sec'y and treasurer. The new building, built of cement blocks, contains milling and sacking rooms, office and warehouse. The former mill on the site burned last summer.

Freeport (Decorah P. O.), Ia.—The manufacture of industrial alcohol will be started here as soon as a few minor details are completed by the Gross Oil Co. of Decorah, who has acquired an old cheese factory here and converted it to use as an alcohol plant. Lacking priorities for obtaining the usual equipment used in the manufacture of alcohol, the cheese plant equipment has been adapted to the new use. Grain, potatoes, fruit juices and other products will be used in the processing operation. The company has a federal permit for operation of the plant, which will be operated under government supervision.—A. G. T.

Avoca, Ia.—H. F. Doyle has purchased all outstanding shares of stock in the Farmers Grain, Feed & Oil Co., and is sole owner of the business, now operating as the Doyle Milling Co. Included in the transfer was the Tanke Elevator which was purchased recently by the Farmers Grain, Feed & Oil Co. Mr. Doyle came here from Persia in 1941, acquiring controlling interest in the Farmers Grain, Feed & Oil Co. thru the purchase of the Knudsen interests. This is the first time that the milling company has been owned by an individual since its organization in 1876, originally known as the Centennial Milling Co. It became the Farmers Grain, Feed & Oil Co. and was incorporated in 1930. The corporation has been dissolved. A new feed grinder is being installed in the basement of the former Tank property, to be used for grinding corn.

Keokuk, Ia.—The Chamber of Commerce sponsored a dinner in the main dining room of the Hotel Iowa at 6 o'clock the evening of Nov. 5, honoring Clarence M. Hidding, general manager of the Purity Oats Division, General Mills, Inc., who has been transferred

to the company's executive offices at Minneapolis. Covers were laid for 150 guests. Special guests of the occasion were James Ford Bell, chairman of the board of directors of General Mills, and Harry A. Bullis, president of the company, who addressed the guests as a part of the program arranged for the occasion.

Storm Lake, Ia.—Ken Bauer, 23, associated with his brother in operation of the Consumer's Feed Co. was drowned late Nov. 8 in Storm Lake when, with Eddie O'Herron, 29, during a duck hunting expedition they went out in a duck boat to pick up a crippled bird that had fallen into the lake. A third companion, remaining on shore, saw the hunters were having trouble with the poles which became stuck in the mud, and started in an automobile to bring help. A blizzard was raging and his auto became stalled in snow. A passerby assisted him to town when the alarm was spread. Men with boats searched over the lake all night, but, while the overturned duck boat, a gun case and some decoys were found, no trace was found of the missing men. Efforts are being made to recover the bodies. Ken Bauer recently was released from the army because of injuries suffered in a training camp accident.—A. G. T.

Stanton, Ia. — The Farmers Grain & Live Stock Co. was named defendant in a suit filed recently in district court for \$6,397.82 total damages for the death of Emil Sunberg on June 26. The petition was filed by Emma and Ethel Sunberg, executrices of the estate of Mr. Sunberg. Reciting the circumstances of the accident, the petition said that Mr. Sunberg was assisting Arvid Sellergren, the elevator general manager, in taking an inventory of the Stanton Co-operative's property on May 1. He had ridden the manlift to the top of the elevator, to measure grain, and had returned to the ground level. When he stepped off, the manlift ascended and hit the top of the elevator, "contrary to the working of said elevator when in a safe and usable condition, breaking said manlift, parts of which fell upon Emil Sunberg and inflicted upon him mortal injuries . . ." The petition charged it is the defendant's duty to maintain the manlift in a safe condition and that it was negligent on this point. Besides for the \$1,397 expenses incurred, the plaintiffs asked the court to award them \$5,000 for damages in the death of Mr. Sunberg.

Plainfield, Ia.—J. Roach Sons, Inc., in cooperation with the State College at Ames, will build a soybean processing plant here. The

plant, of the commercial solvent type, will be operated under supervision of the college by J. Roach Sons, Inc., elevator operators. The project is being handled under a special research appropriation of the last legislature, T. R. Agg, director of the college engineering experiment station, announced. Because of the scarcity of materials, most of the 10-ton capacity plant is being built from second hand materials. The extraction unit, however, will be new. One purpose of the research, Dr. O. R. Sweeney, experiment station chemical engineer, stated, is to develop a plant which can be operated by the regular crew of an ordinary country grain elevator. The Roach Soybean Mill has been incorporated, for \$100,000. Officers, Howard L., James L. and E. A. Roach.

Des Moines, Ia.—Sargent & Co.'s new \$150,000 plant was opened formally Nov. 13 with an open house dedication program and entertainment commemorating also the 55th anniversary of the company. Mark Love, Metropolitan opera star, Harry T. Carlson, conductor of Chicago's Swedish Choral Club and Robert D. Blue, lieutenant governor of Iowa, high-lighted the dedication ceremonies and stage program with other entertainment stars appearing on the two-hour show. There was luncheon for visitors and souvenirs and favors were distributed. All feed dealers and farmers had been invited to attend and 7,000 persons visited the plant during the afternoon. Among the guests was Atwood Roe, Canada's largest feed supply manufacturer. Mr. Roe had not received a personal invitation to be present, but he had heard so much about the new plant he made the trip specifically for a look, he said. The plant, one of the finest modern feed processing plants in the middle west, is the fourth unit in the Sargent & Co.'s group. The structure was designed by Ernest L. Sargent, vice-president of the company, and one of three brothers who own and operate the firm; A. E. Sargent is president and W. I. Sargent treasurer. The main building is 360x104 ft. and is constructed of cement blocks. The elevator, 90 ft. high, has 29 bins. The plant has a daily production capacity of 375 tons of feed. It has a molasses pit of 100,000 gallons capacity and has 1,200 ft. of trackage. Equipment installments are designed so that all ingredients are elevated to the feed mixing machinery; trucks can be loaded from 17 different entrances without interruption. Floor levels have been built to correspond with truck levels. Loading docks permit the unloading of eight railroad cars simultaneously without switching.

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Redfield, Ia.—Homer Everly, new manager of the local unit of the Des Moines Elvtr. Co., has offered a prize of \$5 for the longest sample ear of corn brought to him at the elevator office this month.

KANSAS

Glasco, Kan. — The Glasco Milling Co. recently purchased the old hotel building and will remodel it into a warehouse.

Hutchinson, Kan.—The George E. Gano Grain Co. has added a new unloading sink and 2,000 ft. of switch track at its terminal elevator, cost of the improvements placed at \$20,000.

Coldwater, Kan.—Hugh F. Braly, 63, manager of the Wolcott & Lincoln, Inc., elevator the past five years, was killed Nov. 18 when he fell 35 ft. down the main lift shaft.—P. J. P.

Sabetha, Kan.—Melvin Wenger, son of Alex Wenger, has purchased the interest of Joe Wenger in the Wenger Milling Co., which will be operated in future as Wenger & Son Milling Co. Since the Wenger brothers purchased the mill from George Sauder in 1927 they have completely rebuilt it and installed many new machines. Joe Wenger remained temporarily to assist Melvin in becoming adjusted at his new duties.

Wellington, Kan.—The new 8,000-bu. country elevator built adjacent to the Wolcott & Lincoln, Inc., elevator east of here, has been placed in operation in conjunction with the other elevator. A new 15-ton truck scale has been installed and facilities for unloading trucks at the old elevator are in use. The new elevator was moved here from Waldron, Kan., where the railroad service recently was discontinued, and was rebuilt after being received here.

Mildred, Kan.—Quick work on the part of an employee of the Kansas Soybean Mills when he discovered a fire at the top of a shaft in the storage plant is credited with preventing a heavy loss. The fire endangered thousands of bushels of flax seed and large quantities of soybeans stored in the plant. The man was working in the cupola of the elevator, 125 ft. above ground Oct. 27, when he noticed woodwork about a gasoline engine recently installed at the top of the shaft, burning, the blaze started from the exhaust of the engine. He quickly extinguished the flames, which had gained little headway. The plant is of concrete mainly; it is an old cement plant converted to handle grain storage, and a great quantity of soybeans from surrounding country is taken there.

KENTUCKY

Springfield, Ky.—G. Lloyd Haydon, 83, owner of the Haydon Mill & Elvtr. Co. and a native of the town, died at his home Nov. 11. He is survived by his widow, three daughters and two sons, G. R. and Joseph, both of Springfield.—A. W. W.

Louisville, Ky.—The sale of the Frankfort Distilleries, Inc., largest of Kentucky independents, to the Distillers Corp.—Seagrams, thru subsidiary companies, has been announced. The reported price was approximately \$43,500,000, paying \$43.50 a share for stock with a book value of about \$17 based on cost, whereas the approximately 400,000 bbls. of whisky owned by the company in Maryland and Kentucky is worth far more than the cost. Frankfort had plants here and at Baltimore. Sale was said to have been due to inheritance taxes on large holdings of Lawrence Jones, late head of the company. Both the local and Baltimore plants are fairly large feed producers.

MICHIGAN

Morenci, Mich.—The Osgood mill, one of the oldest landmarks here, which had been in operation almost continuously for nearly 75 years until it was closed last December, has been purchased by Murvin King and will be re-opened.

Constantine, Mich.—Repairs have been made to the Constantine Co-operative Co.'s mill which was badly damaged by fire two months ago, and the plant is in operation. More than \$20,000 has been spent on new machinery, Peter Miller, superintendent, announced.

Parma, Mich.—Kenneth Pulling is new manager of the Parma Co-operative Elevator, starting his new duties Nov. 1. Frank Gilmore has been acting manager since the resignation of Alger Hicks. Mr. Pulling has been at the elevator for the past several weeks getting acquainted with the work preparatory to taking charge.

Mancelona, Mich.—J. Paul Wisler, well known hardware merchant here for many years, has purchased the Mancelona Co-op. Ass'n building and will start a new business, the Wisler Farm Store. Mr. Wisler is installing grinding and mixing equipment for stock and poultry feed. General farm equipment and repairs and supplies for poultry raising will be carried in stock. Feed and hay are on hand now, and the grinding and mixing will be carried on as soon as the equipment can be assembled. C. B. Skinner will be in charge as manager.

MINNESOTA

Rochester, Minn.—D. Eldon Roddis is now associated with his father, David Roddis, in the Roddis Feed Co.

Welcome, Minn.—The Farmers Elvtr. Co. plans to rebuild its elevator that was destroyed by fire Sept. 15.—F. E.

Windom, Minn.—Elevator No. 1 of the Co-operative Elvtr. Co. was destroyed by fire early in the morning of Nov. 11.

Pipestone, Minn.—A 40x56 ft. addition is being built to the warehouse of the Pipestone Grain Co., owned and operated by I. L. Tobias and son.

Hitterdal, Minn.—Nels J. Roos, 66, an officer of the Farmers Elvtr. Co., died Oct. 25.

Ellsworth, Minn.—A new 30-ton scale and new steel grain pit have been installed at the E. A. Brown Co., Inc., elevator of which Ed Watkins is manager.

Blooming Prairie, Minn.—The Farmers Co-op. Elvtr. Ass'n will build two corn cribs with a capacity of 1,200 bus. of corn each. The cribs will be 8x32 ft. and 10 ft. high.

Huntley, Minn.—Larry Babcock, well known manager of the Hunting Elevator for the past six years, has been inducted into the armed forces. Elmo Lane, former assistant manager, has succeeded him as manager of the elevator.

St. Paul, Minn.—W. C. Covington, regional feed, seed and grain specialist connected with the O.P.A. at Des Moines, Ia., is in the St. Paul district office Nov. 24 and 25. He will meet with members of the Northwest Feed Manufacturers and Distributors Ass'n, and will answer questions regarding O.P.A. regulations.

Glencoe, Minn.—The Farmers & Merchants Milling Co. will rebuild its feed mill to house new machinery, doubling the capacity of its grinding department. Priorities for the equipment and material have been obtained and contract for the improvement has been let, L. H. Patten, manager, stated.

DULUTH LETTER

Conrad Littlegard, Grand Forks, N. D., doing business as the Kelly Grain Company, Kelly, N. D., has made application for membership in the Duluth Board of Trade.—F. G. C.

With but a few weeks left before navigation on the Great Lakes comes to a close vesselmen and shippers are concentrating their efforts to get boats to load grain under contract and forward to eastern ports in case of unfavorable weather developing in the final stretch.—F. G. C.

Coarse grains have been in very good demand at peak prices, but keen competition by outside markets at much higher bids have drawn supplies largely away from here and business in the different commodities has been on a rather scanty scale. For a time local houses did a fair business in feed barley, but this has flattened out to near nothing now. Occasionally a car or so of oats, or rye sell, otherwise supplies are thin and trade blank. A good mill and elevator demand for spring wheat has absorbed commission house offerings at firmer limits and advance with the futures. Little or no durum wheat is arriving here for local trade, bulk of the daily receipts being taken up for outside accounts.—F. G. C.

MINNEAPOLIS LETTER

General Mills, Inc., has let contract for construction of a tile office building, to cost \$20,000.

Frank J. Krantz has been appointed acting general traffic manager of the Pillsbury Flour Mills Co., succeeding the late Harry F. Young.

The Kellogg Milling Corp. is building additional warehouse facilities of concrete block construction, to be completed Jan. 1; cost, \$20,000.

Clarence M. Hidding, general manager of the Purity Oats Division, General Mills, Inc., at Keokuk, Ia., has been transferred to the local executive offices of the company where he will assume larger responsibilities in addition to retaining responsibility for the company's units in Keokuk.

MISSOURI

Joplin, Mo.—A fire attributed to a motor in the elevator slightly damaged the Kelso Milling Co.'s building at Twelfth and Sergeant Ave. recently.

St. Louis, Mo.—Eldred A. Cayce, general manager of the Circleville O., plant of Ralston Purina Co. for the past three years, has been promoted to the general offices here where he will be associated with the purchasing department. The transfer becomes effective Jan. 1.

YOUR VOICE on the

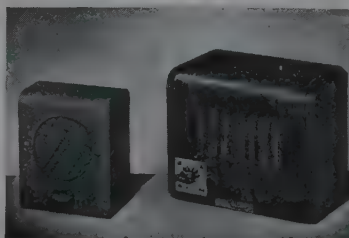
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Platte City, Mo.—The Keys Milling Co. was purchased recently by T. C. Swaney of Kansas City, Mo. He is continuing to operate the mill as a feed plant. The flour mill unit remain idle for the present.

Kansas City, Mo.—Vincel Imhoff, 60, for a number of years a state grain inspector here, died at his home in California, Mo., recently, following an illness of several months due to a heart ailment.—P. J. P.

St. Louis, Mo.—Ralston Purina Co. has leased 60,000 sq. ft. of space in a building at Main and Sidney Sts. The structure is equipped with automatic sprinkler system and is served by a Missouri-Pacific R. R. Co. private switch.—P. J. P.

Sikeston, Mo.—Henry Smith, 42, employee of the Scott County Milling Co., sustained a scalp injury Nov. 13 when he was knocked down by a freight train. He was returning to work after lunch when he was hit by the freight train which was backing up on the track.—P. J. P.

Kansas City, Mo.—The Kansas City Grain Club held a dinner meeting the evening of Nov. 22 at Hotel President. Legislative matters and the question of retaining present quarters in the Board of Trade building or reoccupying the old home of the Exchange at Eighth and Wyandotte Sts., recently purchased by the Exchange, were discussed.

Kansas City, Mo.—Charles T. Manley, well known popcorn processing plant owner, became the owner of 1,760 acres of land in northwest Missouri for which he paid \$115,000. The land, once part of the famous Rankin estate, is largely ranch acreage, but Mr. Manley stated he will devote some of it to popcorn raising and produce cattle on about 1,280 acres. The Manley popcorn elevator is located at Tarkio.

Pleasant Hill, Mo.—The three-story Moundridge Milling Co. plant was destroyed by fire Nov. 10, loss to the equipment and building estimated at \$15,000. Added to the loss were 4,000 bus. of wheat, 2,000 bus. of corn and 1,000 bus. of oats.—P. J. P.—The plant had not been used to mill flour for many months, Willis Pereau, mgr., stated, but had been running day and night grinding government wheat for feed.

Mexico, Mo.—The Missouri Farmers Ass'n, which purchased the W. W. Pollock Milling & Elvtr. Co. mill here, has been granted priorities for its soybean plant and mill machinery from Washington, D. C., and workmen have started construction. M. C. Maze, manager, recently announced. Horner & Wyatt have the contract. Total investment is estimated at approximately \$98,000 and it will require at least three months to complete. Complete reconstruction of the internal structure of the building is included in the reconstruction program. Two expellers with a capacity of processing 500,000 bus. of soybeans per year will be installed.

NEBRASKA

Lincoln, Neb.—J. H. Elliot suffered a broken leg in an accident at the Gooch Mill & Elvtr. Co. mill recently.—P. J. P.

Reynolds, Neb.—Fire Nov. 17 destroyed three government wheat bins in which were stored a large amount of grain.—P. J. P.

Oak, Neb.—The Oak Roller Mills was purchased at auction recently by Reuben Engelhardt. Vic Hoffman will operate the mill.

Fairbury, Neb.—E. M. Baker, district manager for the Moorman Stock Food Co., died of a heart attack as he sat in the lobby of Hotel Crete Nov. 4.

St. Paul, Neb.—The St. Paul Co-operative Grain Ass'n, C. E. Woolman, manager, recently sold at public auction its east coal sheds on the B. & M. railroad right-of-way.

Omaha, Neb.—Harold Roth, vice-pres. and general manager of Omar, Inc., is one of 19 company executives named to the milling industry's national advisory com'tee to the O.P.A.

Naponee, Neb.—Orvill Kenneman was confined to his home for several days recently, the result of a fall at the elevator in which he injured his back.

Palmyra, Neb.—Joe Dowding, manager of the Farmers Elevator for the past nine years, resigned recently and accepted a position as manager of an elevator at Ohio, Neb. He will move there about Dec. 1.

Lincoln, Neb.—Claire Lavern Mock, 19, of Springview, Neb., formerly foreman at the Gooch Mill & Elvtr. Co. plant, was killed in a bomber crash on Oct. 22 at Head Quarters Co., 2nd Bn. 541 Parachute Infantry.

Scribner, Neb.—Work of overhauling the Farmers Co-op. Mercantile Co. elevator has been completed. Among the improvements was the installation of a new distributor, all new spouting and replacement of elevator buckets.

Lincoln, Neb.—State Agriculture Director Rufus Howard has urged the W.P.B. to release to Nebraska mills available machinery for processing soybeans. He said the mills' application for machinery has been on file with the W.P.B. "for some time".

Humboldt, Neb.—All salesmen of the O. A. Cooper Co. were called here for two weeks' special schooling in the feed and flour mill early this month. The company is behind on its orders and took advantage of the situation by giving its salesmen special instruction.

Nebraska City, Neb.—A large supply of soybeans were damaged in a fire caused by an overheated drying device at Butler-Welsh elevator the night of Nov. 7. The blaze was quickly extinguished, the damaged beans in the area of the fire the only loss of consequence. The large elevator is filled with grains.

Lincoln, Neb.—Thomas H. McCarthy, 52, an employee of the Gooch Milling Co., was suffocated when trapped in a 72-ft. bin into which he had fallen Nov. 5. He had been sent to the cupola to aid discharge of feed from a chute into the bin. It was thought he fell or was knocked from the swing suspended over the chute. There were no witnesses to the accident and it was some time later that his predicament was discovered. When he was removed unconscious from the bin, a pulmotor squad and doctor labored for some time but failed to revive him. Mr. McCarthy had been employed at the mill for the past year and a half.

Omaha, Neb.—Directors of the Omaha Grain Exchange named at the recent annual meeting were: Harold Roth, general manager of Omar, Inc.; E. L. Cahill, sec'y of the Burns Grain Co.; C. H. Wright, general manager of the Nebraska-Iowa Grain Co. At a meeting of the Board Nov. 16 the following officers were elected: Frank C. Bell of the Bell Trimble Grain Co., pres.; G. F. Dristy of Udpick Grain Corp., re-elected first vice-pres.; D. O. Aller, Butler-Welsh Grain Co.; re-elected second vice-pres.; R. M. Scoular, Scoular-Bishop Grain Co., treas.; Frank P. Manchester, re-elected sec'y, an office he has held continuously since 1909. This was the third time that Mr. Bell has been elected to the presidency of the Exchange.

Lewellen, Neb.—Oscar Morris is new manager of the Beard Grain Co. elevator.

NEW ENGLAND

Rutland, Vt.—The Interstate Commerce Commission has approved the purchase by the Atlantic & St. Lawrence R. R. of a line of railroad from Island Pond, Vt., to the Canadian boundary and authorized the Atlantic & St. Lawrence to issue \$6,286,000 of capital stock, consisting of 62,860 shares of par value of \$100 each. The stock is to be used to replace sterling shares, to acquire an elevator property and to reimburse the Canadian National for advances for improvements to Dec. 31, 1942. The I.C.C. dismissed for want of jurisdiction the part of the application seeking to purchase an elevator from the Canadian National.

NEW JERSEY

Centerton, N. J.—An investigation of the cause for the disastrous fire that destroyed the George Schalick & Sons feed mill Oct. 5 in which two firemen lost their lives and a third was injured has revealed that it probably resulted from a carelessly cast-away cigarette or match on the ground adjoining the loading platform. Several loads of grain had been brought to the mill that day and emptied into the pit, the loose grain and badly damaged bags discarded and piled on the ground. The fire started in this accumulation. The blaze, when first discovered by a near-by resident, was small. Her son hurried to the spot, attempting to beat out the fire with empty grain sacks while she ran to notify Mr. Schalick, who was in his office, having just completed a round of the plant, during which he cut off the power at the main switch. The spreading flames and sparks set fire to the tar paper siding of the building and flashed like tinder along one side of the plant which had not been covered with corrugated iron as had other parts of the new building.

NEW YORK

Buffalo, N. Y.—The National W.L.B. has approved a 4c an hour general wage increase for workers in Darling & Co., retroactive to last Feb. 15. The original application for a 5c increase was rejected by W.L.B. last April on grounds the hold-in-line order would be violated. An appeal by the company and union resulted in the 4c order. Approximately 50 employees are affected.—G. E. T.

Buffalo, N. Y.—Henry Korn, widely known superintendent of the Saskatchewan Pool Elevator, died unexpectedly Nov. 15. He had been identified with local elevators for over 30 years, starting his grain trade career in the Husted Mill. Mr. Korn was an advocate of greater speed in grain handling, and has been given credit for many of the improved methods and machinery which have been an important factor in the rapid handling that has enabled the Buffalo elevators to handle annually such a large volume of grain. His loss will be felt keenly, not only by the grain elevator trade but by his host of friends thruout the country.



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NORTH DAKOTA

Grenora, N. D.—The H. E. Wicklund elevator is being repaired and repainted.

Clyde, N. D.—The Clyde Grain Co. is a new member enrolled by the Farmers Grain Dealers Ass'n of North Dakota.

Leeds, N. D.—The Nordheugen Supply Co. will construct a feed grinding building, two-story, 24x28 ft., of reinforced concrete.—F. E.

Lawton, N. D.—The elevator of the Lawton Grain & Farmers Elevator Co. burst recently, spilling thousands of bushels of grain on the ground.

Minot, N. D.—Work is underway on the construction of a feed grinding building by the Occident Elevator. Cost is estimated at \$5,250.—F. E.

Nash, N. D.—Clifford Natvig, of Coopers-town, has been named new manager of the Nash Grain & Trading Co. to succeed A. C. Larson, resigned.

Enderlin, N. D.—Ed Kuhn, manager of the Farmers Elevator, got his limit of 10 ducks, mostly mallards, with one shot. He used a 12-gage Winchester gun with No. 8 shot.

Edgeley, N. D.—F. W. Palmer, manager of the Occident Elevator for the past 16 years, has resigned and moved to Bismarck. He had been in the grain business here for 32 years. Dewey Burkett has succeeded him as manager of the elevator.—F. E.

Fargo, N. D.—Ralph F. Gunkelman, widely known through his connection with Interstate Seed & Grain Co., has opened an office in the Merchants National Bank & Trust Co. Building from which he is supervising operation of elevators at Gardner and Grandin, N. D., and conducting a general grain and seed brokerage business. Mr. Gunkelman is a hard and earnest worker in Association interests and has a host of friends in grain and seed circles who wish him success in his latest venture.

Grand Forks, N. D.—A net profit of \$303,791 was produced by North Dakota's state mill and elevator association during the fiscal year ending June 30, 1943, an audit report approved by the state board of auditors showed. Audit showed a surplus on that date of \$655,109; assets of \$4,458,762, exclusive of taxes received by the state in payment of mill and elevator bonds and bond interest. Liabilities totaled \$3,793,653. Flour production increased by 192,542 bbls., and sales increased by 164,958 bbls. over the preceding 12-month period, the report showed.—P. J. P.

Verona, N. D.—With a crew of 20 men rushing the work, the new Verona Farmers Union elevator is now 50 per cent completed. The structure will have a capacity of 30,000 bus.; measure 25x36x60 ft. and will be modern thru-out. Equipped with electric motors, the plans also include a modern office and latest furnishings. Contractor J. H. Fisch expects to complete the building by Christmas. The elevator will replace the one destroyed last May by fire and will fill a much needed place in the community. P. G. Gowan is local manager with Simon Fritz, assistant.

Selz, N. D.—The annex of the Osborne-McMillan Elevator burst open recently, spilling a quantity of grain on the ground.

Jamestown, N. D.—The Occident Elevator was badly damaged by fire the evening of Nov. 13. The blaze starting in the top of the feed mill just after N.P. train No. 4 passed thru throwing sparks, went up the spout to the cupola which burned off, then down the leg well taking two complete legs with drives and motors, also manlift. The local fire department with five hose lines, assisted by two lines furnished by the N.P. Railway, pumped tons of water into the burning elevator that contained over 20,000 bus. of grain including 1,500 bus. of flax. In the 10 degrees above zero weather that prevailed, the mass of flooded debris was converted into solid ice.

OHIO

Paulding, O.—The Waters Feed Mill recently constructed a concrete drive and pit for unloading grain from trucks and trailers. A conveyor for loading ground feed onto trucks also has been installed.

Greenville, O.—The Greenville Farmers Exchange operated by G. D. Stemen for the past three years has been sold to Dale Teaford, Greenville R.R. 3. The new owner has been closely connected with livestock feeding for many years.

Newark, O.—The J. A. Black Co. feed warehouse in East Newark was destroyed by fire the morning of Nov. 10, the loss estimated at approximately \$10,000. Several tons of feed burned. The loss is covered by insurance E. G. Warner, manager, stated.—P. J. P.

Circleville, O.—The Pickaway Grain Co. has taken steps to eliminate a fire hazard at its west end plant by construction of a new cob burner. Many times in the last several years the fire department has been called to the company's plant where fire had broken out in the cob pile.

Akron, O.—Harry Botzum of Botzum Bros., the last of five brothers active in business here for many years, died Nov. 9, aged 71 years. The brothers came from Botzum. They operated a feed, grain and seed business and were interested in other business enterprises. The feed company would have been in business 50 years Nov. 13.

Circleville, O.—Hal Dean, who has been assistant manager at the local plant of the Ralston Purina Co., will become manager following the promotion of Eldred A. Cayce, general manager, to the company's general offices at St. Louis, Mo., Jan. 1. Vaden Couch will fill vacancy made by Mr. Dean's advancement. Mr. Couch operated a country elevator for three years prior to becoming affiliated with the Ralston Purina Co., and for the past five years has engaged in sales for the company in the Washington C.H. area. Mr. Cayce came here in 1940, as successor to Ray E. Rowland, who now is a vice-president of the Ralston Purina Co.

OKLAHOMA

Lawton, Okla.—The Farmers Union Co-operative Exchange elevator and its contents were damaged by fire recently.

Ardmore, Okla.—W. M. Gwyn, sec'y-treas. of the Ardmore Milling Co., who underwent an operation at Hardy Sanitarium recently, is making satisfactory recovery.

Guthrie, Okla.—Fire resulting from an overheated bearing caused an estimated damage of \$150 to the Empire Mill elevator Nov. 9. Damage was limited to woodwork around a conveyor.

Enid, Okla. — The Consumers Co-operative Ass'n, North Kansas City, Mo., on Nov. 15 has purchased and taken over operation of the Palacek Bros. feed mill. Howard A. Cowden, Ass'n president, said plans are to obtain a soybean mill, cotton seed mill and a plant for the dehydration of alfalfa later. The co-operative has been interested in the feed business for many years and determined to enter it in a substantial way. The mill's name will be changed to Consumers Co-operative Ass'n, and will be used primarily to serve member dealers.

Stilwell, Okla.—A draw bar on one of the cars of the northbound K.C.S. freight No. 42 dropped down to the track in the north edge of town Nov. 2 at 10:30 a. m., eighteen cars piled up, some containing high octane (aviation gasoline), which ignited, requiring only a few seconds to transform the scene into a blazing inferno. The grain elevator of Reese & Etheridge Produce Co., owned by R. L. Reese, Perry Etheridge and C. J. Carson unfortunately was adjacent to the wreck. Quickly the flames ignited the structure, burning it to the ground. The elevator was packed to the ceiling with bean baskets that would have been used to harvest the 1944 bean crop. The intense heat of the raging flames coupled with exploding tank cars made any effort to save the doomed elevator impossible. When the flames died down sufficiently to allow spectators to approach the scene, at one end of the wreck was found a car of raisins, and at the other a car of lubricating oil. The contents of both quickly disappeared, with such a flurry of scooping up, dipping and carrying away (no ration points presented) as the community will never see again.

PACIFIC NORTHWEST

Post Falls, Ida.—The Kirkpatrick-Nylander Feed Mill has started operations with Mr. Nylander in charge of feed grinding and mixing.

Portland, Ore. — John Campbell, formerly manager of the Greely Elevator Co. in Spokane, Wash., has taken a position with the Pillsbury Flour Mills Co. here.

SOUTH DAKOTA

Vermillion, S. D.—The J. C. Mullaney Grain Co. and the National Bank of South Dakota recently sponsored a corn show.

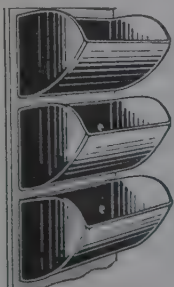
SOUTHEAST

Graceville, Fla.—Fire destroyed the Greenwood Products plant on Nov. 7 and 10,000,000 lbs. of peanuts stored there. G. W. Morrow, plant manager, estimated the loss at approximately \$1,000,000. He stated probably about 50 per cent of the peanuts can be salvaged for oil.

TENNESSEE

Memphis, Tenn.—The Ralston Purina Co. has moved into the building on Huling, recently purchased. Many improvements were made on the structure, among them the building was made rat-proof.

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TEXAS

Perryton, Tex.—The Equity Exchange wood elevator burned Nov. 8.

San Marcos, Tex.—H. F. Wanhorst, recently honorably discharged from the Army at Camp Hulén, has opened a feed store here.

Amarillo, Tex.—T. C. Dunn has been appointed manager for the Uhlmann Grain Co. office. He succeeds F. C. "High" Higgins, manager here the past 14 years, who joined the U. S. Navy, Seabees division.

Tyler, Tex.—Fire, starting in the warehouse of the Fant Milling Co. where a large wholesale supply of feed grain and other materials was stored the night of Nov. 14, destroyed the building and contents at a loss estimated at \$60,000, and before extinguished, had spread to adjoining buildings, burning almost a city block.—P. J. P.

Houston, Tex.—W. C. Homeyer has been appointed manager of sales research and nutrition, feed department, for the Houston Milling Co., Inc. Mr. Homeyer has been actively engaged in research pertaining to poultry, livestock and dairy for nearly 25 years. He has been director of education and research at the Universal Mills, Fort Worth, for 15 years, and prior to that was in the poultry department of the John Tarleton Agricultural College.

UTAH

Layton, Utah.—The Layton Milling Co. was damaged badly by fire and water when a blaze started in a grain bin on the upper floor. An employee discovered the fire. Quick, efficient work on the part of the Layton fire department prevented total destruction of the plant. They had the fire extinguished by the time the Ogden fire department, also summoned, arrived. Heaviest fire damage was in the dust collectors and grain bins. A new warehouse has just been completed and adjoins the elevator, which is one of the largest structures here. A spark from a hammer mill is believed to have started the fire.

WISCONSIN

Emerald, Wis.—Wm. Schoenwetter is building an addition to the elevator.

Cambridge, Wis.—The Cambridge Feed & Seed Co. has constructed a concrete driveway at its mill.

Princeton, Wis.—Fred W. Schmidt has sold his wholesale and retail flour and feed business to Edgar Lange of Menomonee Falls.

Platteville, Wis.—The Henry Cordts feed store has been sold to Eastman Cartwright Lumber Co., Lancaster, the new owners taking possession Nov. 1.

Milwaukee, Wis.—The annual meeting of the Central Retail Feed Ass'n will be held here June 5, 6, 1944. Headquarters of the convention will be at the Hotel Schroeder.

Janesville, Wis.—The Farm Feeds, Inc., has been incorporated; to deal in farm livestock and poultry feed; \$10,000 or 100 shares at \$100 each. Chas. E. Arthur, Herb. Schauf and Dorothy E. Prox, incorporators.

Necedah, Wis.—Jos. Moravec, proprietor of the Farmers' Grist Mill, has disposed of his stock in trade and fixtures to Meyer Gronik, of Gronik, Inc., Milwaukee, brokers, and work of arranging items for shipment is well under way.

WYOMING

Casper, Wyo.—William Valhousky, formerly sales manager for the Chadron Milling Co., Chadron, Neb., has accepted a position with the Nolan Feed Co.

New Feed Trade-Marks

KASCO MILLS, INC., Toledo, O., No. 460,000, for a dog ration.

CASCO MILLS, INC., Waverly, N. Y., the word "Kasco", No. 461,318, for dog ration.

ALLIED MILLS, Chicago, Ill., the word "Economy", No. 460,206, for poultry feed.

THE BORDEN CO., New York, the word "Ladpro", No. 460,518, for poultry feed supplement.

ROBERT F. HUNSICKER, doing business as Allen Products Co., Allentown, Pa., the words "All Pro", No. 459,581, for dog foods.

HARRY J. THEOBALD, doing business as the Theobald Industries, Kearney, N. J., the word "Chuck", No. 461,332, for dog food.

G. C. BAILEY, doing business as E. W. Bailey & Co., Montpelier, Vt., the name "Bailey's", No. 457,869, for livestock and poultry feed.

STOCKMENS FEED MFG. CO., Clovis, N. M., the words "El Rancho" formed of rope, No. 462,523, for mixed feeds for livestock and poultry.

GEO. A. JEFFREYS, doing business as Jeffreys Laboratories, Salem, Va. The word "Kaf-Gro", No. 461,658, for feeds containing biochemically processed yeast, vitamins, enzymes and lactic acid.

SECURITY MILLS, Knoxville, Tenn., the word "Security", No. 461,572, for animal and poultry feeds.

LACTO-VEE PRODUCTS CO., Dayton, O., the words "Lacto-Vita", No. 460,704, for blend of proteins, vitamins, iodine and minerals used in the preparation of poultry rations, hog concentrates, dog and fox feeds, pig meal and dairy ration.

For selling corn over the ceiling price the federal court at Springfield, Ill., gave the government judgment against Walter Wolbrink of Ursa for \$135.09, and against L. H. Mamer of Fieldon for \$829.50, both farmers.

Grape Fruit Pulp as Dairy Feed

About one-third of the total weight of grapefruit and oranges entering a citrus cannery ultimately is used as human food. The remaining portion of the fruit formerly was lost in processing, or was disposed of as cannery waste at considerable expense. The peel, rag, and seed provide a large potential source of feed for cattle. By drying this material the citrus canning industry has changed a liability into an asset, reducing the cost of disposal, and converting the by-product into a non-perishable salable feed. The present utilization of the material resulted in the Florida production of 18,623 tons of dried citrus pulp during the 1939-1940 season.

The dried grapefruit pulp used in most of the present investigations was the product originally on the market in 1932. The pulp was dried commercially using grapefruit rag, seed, and peel direct from a cannery. This material was passed between large corrugated rollers which cut the peel into narrow strips, crushed the seeds, and squeezed out much of the "free" water. This rolled material was conveyed into a large drier, where it was subjected to direct heat from an oil-burning furnace, and reduced to about 4 per cent moisture. When bagged and stored in a warehouse the grapefruit pulp absorbed water from the atmosphere until it attained a moisture content of 10 to 12 per cent.

The process of manufacture was changed prior to the second and third comparative feeding trials. The product used in those trials was prepared by adding a small amount of a calcium compound to the macerated pulp. This set free a part of the "bound" water (water of constitution), and allowed more water to be removed mechanically from the peel. Some soluble material was removed with the water. With a shorter drying period, less fuel was required than with the earlier process. This dried citrus pulp had a light grayish color and a pleasant aroma.

Slightly increased milk yields while the cows received the grapefruit pulp ration were offset by increased consumption of feed and corresponding body gains during the periods on beet pulp. These differences were within the limits of error in working with biological materials.

Based on chemical composition, total digestible nutrients and results obtained in the comparative feeding trials, dried grapefruit pulp is considered to be the equal of dried beet pulp in rations for milk production.

Dried grapefruit pulp was palatable to dairy cows, even after they had received their full regular feed.

Dried grapefruit pulp is a bulky feed, the weight varying according to the process of manufacture. The average density of dried grapefruit pulp was .71 pounds per quart, and of dried grapefruit meal .97 pounds.

Dried grapefruit pulp, used in these trials, yielded 1.2 per cent of digestible crude protein and 76.0 per cent of total digestible nutrients. The proportion of seeds contained and the variety of grapefruit would affect the composition and digestible nutrients slightly.

Slightly more milk and butterfat were produced while the cows received dried grapefruit pulp, but feed consumption and body weights were slightly greater during the periods on dried beet pulp. Results indicate that these two by-products are practically equal in feeding value when supplied as bulky carbohydrate feeds to dairy cows.

No flavor characteristic of either dried grapefruit pulp or dried beet pulp was noted in the milk obtained during these feeding trials.

Dried citrus pulp is a desirable bulky carbohydrate concentrate for use in the rations of dairy cattle.—Bulletin 354, Florida Agricultural Experiment Station.

This debenture thing for farm relief doesn't get any cheers out of us whatsoever. To our way of thinkin', what farm relief needs is not Debenturing but Debunking.



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International Wheat Relief Pool

A substantial stockpile of wheat has been accumulated by the United States, Canada and Great Britain as part of the 100,000,000 bus. international relief pool, reports Director Lehman. The United States is to supply 50,000,000 bus.

Argentina is a member of the pool.

Flour Subsidy to Cure Ceiling Failure

The flour ceiling and uncontrolled wheat prices have created a squeeze that soon will compel mills to close.

Sensing that a flour shortage would result the administration will make effective a subsidy determined by the difference between the wheat prices on which the flour ceilings in MPR 296 were based and the average prevailing wheat prices. The rate of subsidy will be determined once a month and will remain in effect for a month at a time. It will be announced close to the end of each calendar month and the rate so announced will remain effective through the following month.

There will be four subsidy rates—one applicable to the Pacific Coast milling region to all types of wheat milled therein; wheat milled east of the Pacific Coast will be subject to three subsidy rates—one for hard wheat, one for soft wheat and one for durum.

A subsidy will be paid per bushel of wheat ground during the subsidy period, except that it will not apply to wheat ground to cover unfilled orders on the books when it goes into effect. When the subsidy goes off mills will be entitled to collect the subsidy on unfilled orders then in existence, provided these orders are delivered within 120 days, and provided the total unfilled order balance at that time is not greater than the mill's unfilled orders at the beginning.

In the case of small mills which ground less than 110,000 bus. of wheat in the first eleven months of 1943, an optional method of reporting wheat grind is allowed. Under the optional method the mill would report its grind each month and receive the subsidy thereon without reference to any outstanding contracts. Any mill which elects to operate under this plan would not be eligible to obtain a subsidy on outstanding contracts in existence at the end of the subsidy period.

The paying agency will be the Reconstruction Finance Corporation. Mills are to report their grind within thirty days after the end of each month to a branch office of RFC. The experience of the meat packing and creamery industries is that RFC branch offices issue subsidy checks within a few days of date of claim.

No announcement has been made as yet as to the effective date of the subsidy program. The Millers National Ass'n says "The best guess at the moment is Dec. 1, but that is not based upon any official statement. It is possible that the subsidy program may be announced on a certain date and made retroactive to an earlier date."

Lend-Lease Grain

Roy F. Hendrickson, director of food distribution of the W.F.A., in an address at the Food Forum, Albany, N. Y., Nov. 18, stated that since March, 1941, when lend-lease began to Nov. 1, we have shipped to Great Britain 555,000 long tons of grain; and that during the 12 months beginning Oct. 1, 1943, we expect to ship 335,000 long tons of grain.

Since December, 1941, when we made our first food shipment to Russia, to Nov. 1, our deliveries have included about 390,000 long tons of grains, and for the 12 months beginning Oct. 1, 1943, we plan to send the Russians 1,098,000 long tons of grain.

Sampling of Feeds for Analysis

Under the feedingstuffs law the Agricultural Experimental Station is charged only with the analysis of samples of feedingstuffs collected by the State Inspector under the direction of the Commissioner of Agriculture. It does, however, each year analyze a considerable number of samples drawn by individuals representing stock purchased by them for their own use. The object of the purchaser who asks to have the samples analyzed is usually to satisfy himself whether the feed meets its guaranty and if it does not, to obtain evidence upon which to base a claim for shortage.

The Station can assume no responsibility for the sampling of these unofficial samples but can attest only the accuracy of the analysis of the sample as submitted. It is practically impossible to secure a representative sample of a feedingstuff composed of several ingredients varying widely in composition without the aid of a sampling tube for drawing the sample and proper equipment for mixing it. A feed may contain as one of its ingredients gluten meal averaging 40 per cent protein, and as another ingredient oat mill feed averaging five per cent protein. These materials are so different in physical condition that the shaking in transit tends to separate them even though they may have been perfectly mixed by the manufacturer before bagging. It is apparent that an accurate sample of a ton of this feed can only be had by drawing a core from several bags. The official method requires ten. Since a representative sample is as essential as an accurate analysis in judging the value of a shipment of feed, it is evident that a satisfactory adjustment can seldom be effected on the basis of an unofficial sample.

Notwithstanding the objections which may be raised to the analysis of samples taken without proper sampling equipment, the Station is disposed to continue this work as long as there is evidence that it constitutes a useful service. The samples so submitted should be drawn from at least ten bags in a manner which will insure that the small lot sent for analysis is as accurately representative as possible of the large lot from which it is taken. Because of the cost of labor and materials, an analysis is not usually warranted on a sample drawn from less than a one-ton lot of feed.

A one pound sample is sufficient for the analysis. It should be sent in a glass jar or tin box to prevent loss of fine particles or a change in the moisture content. In order that the department may have a satisfactory record of the sample analyzed, and may know whether or not the manufacturer and the dealer are complying with the requirements of the law, the following information should be submitted concerning each sample.

Brand
 Manufacturer
 Address
 Guaranty:
 Fat
 Crude Fiber
 Ingredients
 Dealer
 Address
 Number of bags in lot
 Number of bags sampled
 Price per 100 pounds
 Your name
 Your address
 Your reason for requesting analysis

New Hampshire Agricultural Experiment Station, Durham, N. H.

Absenteeism in August as a result of sickness, nonindustrial accidents, and personal reasons caused the loss of 39,550,000 man days in American industry, according to estimates based on the regular monthly survey of the National Industrial Conference Board. This figure is almost 4,000,000 man days greater than the 35,680,000 man days lost for the same reasons during July.

SCALE TICKETS FOR GRAIN BUYERS

Scale and Credit Tickets—Form 51 Duplicating contains 100 leaves of white bond paper, each leaf bearing five tickets, machine perforated for easy removal, and 100 leaves of yellow post office paper, each leaf bearing five duplicates which remain in the book. Also 4 sheets of No. 1 carbon, size of book 5½x13 inches, check bound, well printed. Each leaf is one ticket wide and five tickets deep. Order 51 Duplicating 500 tickets. Price, \$1.25, plus postage. Weight, 1½ lbs.

Crop Delivery Record (Duplicating) — This multiple load scale ticket form has two tickets to a page so that grain from two farmers may be recorded without turning a leaf. Each ticket is ruled to record receipt of 25 loads including the date, hauler's name of each load, gross, tare and net, and has spaces at the bottom for recording the total bushels, the price, the check number, and the total amount paid in settlement. Especially convenient when a farmer sells his entire crop at one time, delivering all of it within a few days. Originals (120) of attractive goldenrod bond paper, 125 duplicates of manila, and 3 sheets of No. 1 carbon paper to the book, with heavy gray pressboard covers, cut flush. Spiral wire bound so that open book lays flat, or may be folded back upon itself in open position to facilitate entries. Size, 8½x10½ inches. Shipping weight, 2 lbs. Price, \$1.25 each, plus postage. Order Crop Delivery Record, Form 69 Spiral.

Improved Grain Tickets—Using Form 19GT as a scale book saves much time and labor as one writing with the use of carbon will give you a complete record and a ticket for the hauler. Each of the 125 original leaves bears four scale tickets, printed on white bond, machine perforated. Each ticket is 3 inches wide by 6½ long. The 125 duplicate leaves are printed on manila, but not perforated. Check bound at top of tickets with hinge top cover, 600 tickets in each book arranged horizontally. Each book is 7½x13 inches, supplied with 5 sheets of No. 1 carbon. Duplicating. Weight, 2½ lbs. Order 19GT Dup. Price, \$1.35, plus postage.

Scale Ticket Copying Book — Contains 150 leaves bearing 600 originals and 600 duplicates, four originals and four duplicates printed on each leaf and perforated so outer half of each leaf may be folded back on the duplicate, thus giving an exact copy of all entries on the original. Leaves of white bond are machine perforated between tickets so they may be easily removed without tearing. Duplicates remain attached to original until all entries are completed. Check bound, size 9½x11 inches, and supplied with 6 sheets of No. 1 carbon. Order Form 73. Weight, 3½ lbs. Price, \$1.45, plus postage.

Duplicating Scale Ticket Book — A labor-saving scale ticket book in which the buyer keeps a carbon copy of the entries made on every scale ticket issued, so altered or spurious tickets may be readily detected. This book contains 100 leaves of white bond paper, machine perforated, bearing 500 tickets, inter-leaved with 100 blank manila sheets. Well printed and bound in heavy board covers. Supplied with 4 sheets of No. 1 carbon paper, size 8½x11 inches. Order Form 63. Price, \$1.55, plus postage. Weight 3 lbs.

Duplicating Wagon Load Receiving Book—This book is designed to facilitate the work of country buyers during the busy season when each farmer is delivering a number of loads daily. Each leaf bears two tickets and is perforated down the middle so that when the sheet is folded back on itself, and a sheet of carbon inserted, an exact duplicate will be made of each entry on the other side of the sheet. Each leaf has room for name of farmer and the haulers of 34 loads in duplicate. Outer half may be torn out and given to the farmer or sent to headquarters of line company. The book is 12 x 12 inches, check bound with heavy boards, contains 225 leaves ruled both sides, and nine sheets of No. 1 carbon. Order Form 66. Weight, 4 lbs. Price \$2.85, plus postage.

Cash with order for twelve copies of any of the above books earns 10% discount.

GRAIN & FEED JOURNALS CONSOLIDATED

327 So. La Salle St., Chicago

Whey as a Livestock Feed

By W. V. PRICE, G. BOHSTEDT and I. W. RUPEL
of Wisc. Exp. Sta.

A great tonnage of whey is produced annually as a by-product of Wisconsin's cheese industry. While whey is over 90 per cent water, yet the 6 or 7 per cent dry matter contained in it is of very high nutritional value. The protein, fat, milk sugar, minerals, and vitamins making up this dry matter should be utilized to the best possible effect especially during these war times.

The composition of whey differs because the milk from which it comes is not always alike and the cheesemaking operations vary.

Milk and whey, commonly found at American cheddar cheese factories in Wisconsin will contain the following:

Constituent	Milk	Whey
Water	87.8	93.5
Fat	3.5	0.3
Proteins	3.1	0.8
Milk sugar (lactose)	4.9	4.9
Ash (minerals)	0.7	0.5
Total dry matter	12.2	6.5

Whey is usually skimmed to remove the fat and the remainder of the whey solids are a valuable feed for hogs, calves and poultry. Skimmed whey from swiss, limburger and brick cheese factories, even from casein manufacture, are essentially the same as whey from American cheese factories.

In addition to the proteins, milk sugar and salts or minerals, whey contains liberal amounts of certain vitamins.

WHEY PROTEIN GOOD FOR SUPPLEMENTING GRAIN PROTEINS.—Albumin is the chief whey protein because it is soluble in water and is not coagulated by rennet; it can be coagulated by heat to form albumin cheese. Albumin, like casein, contains suitable proportions of all the essential amino acids to support normal growth and reproduction. It is richer than casein in cystine, the amino acid so essential for growth. This whey protein, because of its peculiar chemical nature, is a valuable supplement for grain proteins.

MILK SUGAR AIDS DIGESTION.—Milk sugar is a carbohydrate. During the process of digestion it breaks down slowly to form an acid reaction in the intestinal tract; this is regarded as a desirable condition because it reduces the toxic decomposition products of protein putrefaction. Milk sugar favors calcium assimilation which tends to increase the formation of stronger bones.

Since it is soluble in water practically 90 per cent of the milk sugar is found in whey. As the whey sours a portion of the sugar is changed to lactic acid.

WHEY RICH IN CALCIUM AND PHOSPHORUS.—The most abundant and important minerals of whey are calcium and phosphorus. Other minerals like sodium, potassium and iodine are present in small amounts but calcium and phosphorus are the most valuable.

The amounts of calcium and phosphorus in whey vary with the composition of the milk and somewhat according to the type of cheese made from the milk. In a normal process of cheesemaking about 40% of the calcium and 43% of the phosphorus of the original milk are found in the whey from cheddar cheese; slightly smaller proportions of these salts are found in the whey from swiss, brick and limburger cheese. The differences are small and probably insignificant for all practical feeding purposes.

VITAMINS IN WHEY.—There are several vitamins in whey which play an important part in good nutrition. With the exception of vitamin A, which is associated with the milk fat, whey contains in general a large proportion of the vitamins found in milk. This fact probably tends to explain the demonstrated value of whey as a stock food.

Vitamin A is present in whey in very limited quantities because this vitamin is associated with the fat in milk and consequently is almost entirely retained in the cheese or is separated

from the whey with the small amount of fat remaining after the cheesemaking operations.

Vitamin B₁ (thiamin) is the anti-neuritic vitamin. Without it there is loss of appetite and decreased efficiency of the digestion processes. The amount of this vitamin in milk is quite constant, and, since it is soluble in water, a large proportion of it is found in whey.

Vitamin B₂ (riboflavin) a growth promoting vitamin, remains largely in whey. This important, valuable vitamin is essential in the growth and development of animals and poultry.

Vitamin C (ascorbic acid), as with all vitamins, is more necessary during periods of active growth. It is water soluble and most of it found in the original milk is removed from the cheese vat with the whey.

Vitamin D (or provitamin D) is present in whey but not in amounts sufficient to prevent rickets when the whey is fed to animals.

Other vitamins known to be present in whey are vitamin B₆ (vitamin K), vitamin E and factor W.

FEEDING WHEY TO CALVES.—A high protein concentrate mixture such as the following: corn, 25 lbs; oats, 25 lbs.; middlings, 25 lbs.; linseed or soybean meal, 25 lbs, and salt, 1 lb., is recommended for use with whey until the calves become five to six months old. At that age, if good legume hay is fed, a mixture somewhat lower in protein may be used.

For younger pigs some protein rich feed, such as linseed meal or wheat middlings, should be added to barley and whey to balance the ration more completely. When corn and whey are fed, a supplement should be used even with pigs over 150 pounds in weight because corn contains less protein than barley. If pigs are given all the whey they will drink there is no further need, even for young pigs in dry lot, of supplying protein rich feeds of animal origin. Linseed meal and wheat middlings, for example, give entirely satisfactory results.

Springfield, Ill.—Three officers of the United Farmers of Illinois have filed suit in the Sangamon County Circuit Court attacking as unconstitutional the payment of \$10,500 per month to 130 farm and home county advisors who are working part time to promote the activities of the Illinois Agricultural Ass'n, alleged to be a private enterprise formed for the benefit and profit of its members.

From Abroad

Canada has offered 100,000 tons of wheat to alleviate the famine in India.

Argentina, it is rumored, will permit the resumption of trading in wheat for future delivery.

France's wheat crop amounted to 236,000,000 bus., compared with 335,000,000 bus. the year before.

Argentina's exportable surplus of wheat has been revised upward by Broomhall, to 145,250,000 bus.

The Australian wheat acreage this year is estimated at 8,317,000, compared with the licensed 10,950,000 acres of 1942.

Allowable Dodder Cut

The maximum number of dodder seed allowed in one pound of lespedeza seed has been reduced by the North Carolina State Board of Agriculture from 2,500 to 1,000.

D. S. Coltrane, assistant to the Commissioner of Agriculture, says:

"We have been waging a fight against this parasitic enemy to the growth of lespedeza for five years and the fact that this state leads the nation in the production of lespedeza seed is due in North Carolina in no small part to the work which has been done by seed processors and dealers."

Open interest in rye futures on the Chicago Board of Trade is several times as great as the amount of rye in store available for delivery, leading to an investigation of the holders of contracts, by the F.D.A. and the Board of Trade. Individual open interests of 25,000 bus. or more must be reported to the business conduct committee.

Development of 10,000 acres of rice land with use of prisoners of war looms as a possibility with the disclosure that James A. Crain, manager of the Lee Wilson plantation properties of Wilson, Ark., had leased the abandoned Civilian Conservation Corps camp near Jonesboro, Ark., and plans to convert it into a prison camp. Mr. Crain gained control of more than 15,000 acres, most of it state-owned and undeveloped, in Craighead and Poinsett counties, centering around the old Hood lake section.—Jas. H. Glass.

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Field Seeds

Nampa, Idaho.—The new corn drier built last summer by Northrup, King & Co., is now in operation.

Some oats tested at the Seed Laboratory of Iowa State College have run as low as only 25 per cent germination.

Atlanta, Ga.—H. W. Brown, formerly vice pres. of the H. G. Hastings Co., who joined the company in 1899, died Nov. 7.

Center Junction, Ia.—The plant of the McNeilly Hybrid Seed Corn Co. burned Nov. 22, with 6,000 bus. of corn. Loss, \$80,000.

Bamberg, S. C.—As the farmers Cash Exchange J. C. Horne will operate the Dickinson Feed & Seed Service he recently purchased.

Manhattan, Kan.—Alfalfa seed amounting to 1,200 pounds paid for by farm organizations in Kansas will be sent to Russia next month.

Rupert, Idaho.—A branch warehouse in charge of Max Hadenfeldt has been opened here by the D. Landreth Seed Co., of Bristol, Pa.

Thief River Falls, Minn.—The Farmers Co-operative Grain & Seed Ass'n will erect a warehouse and make improvements costing \$13,000.

Emmetsburg, Ia.—Lyle Hubbard has left the Dakota Improved Seed Co. to deal in seeds of the Turner Hybrid Seed Co., of Grand Junction.

Akron, O.—Harry Botzum of Botzum Bros. died Nov. 9 aged 71 years. He was the last of five brothers who established the seed business here many years ago.

Boise, Idaho.—Airplane seeding of a 2,000-acre burnt over tract was accomplished by the U. S. grazing service in 3.5 hours flying time. How much of the seed will grow?

Chicago, Ill.—The International Crop Improvement Ass'n will meet Nov. 29 to Dec. 2, and review and revise the rules for the certification of all seeds, thru subcommittees.

Faribault, Minn.—The Farmer Seed & Nursery Co. has restored an old furniture plant to add two buildings with over 15,000 square feet of additional storage space.

Growers had sold up to Oct. 15 about 87 per cent of the commercial crop of common rye-grass seed, 91 per cent of hairy vetch, and 92 per cent of Austrian winter peas.—U.S.D.A.

Belle Plaine, Ia.—The roof is being placed on the new 40x80-ft. drier of the Funk Bros. Seed Co. The company has been awarded the Treasury "T" flag for its employees' record in buying war bonds.

Council Bluffs, Ia.—C. G. Ouren on Nov. 1 celebrated the anniversary of the founding of the Ouren Seed Co. by the purchase 50 years ago of the interest of Mr. Frederick in the seed firm of Shugart & Frederick.

Clear Lake, Ia.—Ralph Saxon, seed and shrub salesman, pleaded guilty to fraud thru the mails and was fined \$600. He obtained several hundred dollars in commissions from the Owatonna Nursery by reporting fictitious orders.

Chicago, Ill.—Geo. S. Green, former pres. of the Illinois Seed Co., who has resided in Florida for several years, on his 80th birthday anniversary recently was presented with an album containing messages from several hundred friends.

Washington, D. C.—Corn cannot be bought as seed corn over the ceiling prices unless such corn has previously been tested and shown to be of such quality and corn bought as seed corn at over the ceiling prices can only be sold for seeding purposes, rules the O.P.A.

Washington, D. C.—Growers had sold up to Oct. 15 about 87 per cent of the commercial crop of common ryegrass seed, 91 per cent of hairy vetch, and 92 per cent of Austrian winter peas. Movement of these seeds has been faster than in 1942, but slower than in 1941.—U.S.D.A.

Washington, D. C.—Movement of Sudan grass seed from farms this year has been very much faster than usual. Up to mid-October 37 per cent of the commercial crop had been sold by growers, compared with 9 per cent last year and 7 per cent, the 5-year (1937-41) average for October 15. Movement has been most rapid in Texas, where nearly half the crop had left the hands of growers.—U.S.D.A.

New Seed Trade-Marks

W. A. SIMPSON CO., Baltimore, Md., the words "Purity" and "Lawn Seed", No. 461,329, for lawn grass seed.

ASSOCIATED SEED GROWERS, INC., New Haven, Conn., the word "Texgrow", No. 462,106, and blue double stripes obliquely on the bag, No. 462,107, both trade-marks for garden and field seeds, bulbs and plants.

Black Market in Clover Seed

The O.P.A. district office at Des Moines, Ia., reports that farmers in some instances have been getting \$2 or \$3 per 100 pounds over the maximum of \$27 for alsike clover seed, it was reported.

"Evasion of this regulation will not be condoned," one official said. "Some prosecutions are in process. The government is going to purchase some of this seed for lend-lease. It will be used for planting in ravaged parts of Russia and Asia after the war.

"We don't want a black market to dry up the supply."

Alfalfa Seed Moving Fast

Movement of alfalfa seed from farms this year has been the fastest since 1937. Up to Oct. 15, about 67% of the commercial crop had been sold by growers, compared with 49% last year and 48% the 5-year (1937-41) average. Movement has been fastest in Oklahoma and Arizona, and slowest in Utah and Wyoming.

Prices to growers of this seed, averaging \$33.33 per cwt for clean seed, were the highest on record and compared with \$25.57 last year and \$18.32 the 5-year average.

Estimated production this year, together with last year's in parentheses, in groups of states as provided for in OPA maximum price regulation No. 471 (Amendment 1 of which places Oklahoma approved origin seed in central group instead of the southern) follows: Northern, 405,900 bus. (357,800); central, 500,100 (365,000); southern, 173,400 (254,900).—U.S.D.A.

Peoria, Ill.—Harry G. Atwood, a large stockholder, will contest the sale of the Century Distilling Co., a subsidiary of Allied Mills, Inc., which is to be voted on Dec. 8.

Texas Seedsmen Meet

Lester J. Cappelman, regional F.D.A. administrator, told the Texas Seedsmen Ass'n meeting at Fort Worth, Nov. 17 and 18, that America produced enough seed for the needs of the United States and most of its allies this year, although war cut off the importation of seeds from the European continent. He said vital seeds have been flown to the Middle East, India, Rhodesia, Malta and Africa.

Texas has a long way to go in the development of hybrid seed corn but is progressing, the convention was told by C. H. McDowell of the Texas A. & M. College faculty. In the Corn Belt states, he said 98 per cent of the planting is done with hybrid.

Officers were re-elected and two new directors were named.

The officers are W. C. Bigby, Fort Worth, pres.; Max Graham, San Antonio, vice-pres., and A. J. Biggio, Jr., Dallas, sec'y-treas.

The new directors are Leon Rosenberg, Greenville, and J. D. Johnson, Plainview, who were elected to three-year terms.—P. J. P.

Sow Tested Varieties of Oats

J. E. Johnson, pres. of American Soybean Ass'n, writes: Strange, but true we have intelligent farmers listening to the story of the good salesman selling oats that range below the 5th in production, and at the ridiculous price of \$3.50 per bushel. 50c paid at time of taking the order, \$3.00 C.O.D. Using Canadian samples of high weight and clipped to make the eye appeal greater. Remember what P. T. Barnum said—, must still be true.

The Illinois Crop Improvement Ass'n reports field inspection of 6311 acres of oats of the following varieties:

Tama, 789.9; Vicland, 2041.6; Boone, 1442.5; Marion, 1767; Columbia, 190; Iowar, 80.

The purity requirements for field inspection is 99.5%. The same requirements of purity for the laboratory test of the cleaned seed sample.

Seed treatment is advised for smut susceptible varieties. Smut of oats causes the greatest average bushel loss of any diseases of small grains in Illinois. Yields are increased whenever seed treatment is used on seed where there is smut infection. It also tends towards increasing the yields of cleaned seed. Seed treatment can be termed as a big help from a small item.

Selected oat varieties grown in comparative test plots by the Illinois Agricultural Experiment Station at Urbana and Mt. Morris showed the following average yields in bushels per acre:

Tama, 64.7; Vicland, 64.3; Marion, 63.5; Boone, 62.7; Vanguard, 49.8; Columbia, 49.5; Erban, 48.3; Cartier, 45.6; Legacy, 31.9, and Eagle, 30.5.

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Seeds, Sudan Grass, Soy Beans, Cow Peas*

Leading Varieties of Lespedeza

By O. H. SEARS and W. L. BURLISON, University of Illinois, College of Agriculture.

Several distinct commercial varieties of annual lespedezas are available in the United States. Three of these, Common, Tennessee 76, and Kobe, belong to the species *Lespedeza striata*, and Korean, Harbin, and Early Korean 19604 belong to the species *Lespedeza stipulacea*. These are the only two annual species of lespedeza. The rest of the 125 species are all perennials. *Lespedeza Sericea*, called *Sericea*, is, however, the only perennial commonly used as a crop plant.

The annual lespedezas are small-branched plants which grow either erect or spreading. Under the best conditions the plants reach a height of 30 to 36 inches; more often 5 to 15 inches is the average.

The dark purple seeds are about the size of red-clover seed and are borne singly in pods, in which they are retained when threshed. The size of the seed and the size of the calyx lobes, which partially inclose the brown hulls, vary with the variety and form a basis for distinguishing one variety from another.

Korean plants grow more rapidly in spring than do those of other annual varieties. Korean blooms two weeks earlier and matures seed almost a month before Tennessee 76 and Kobe. It is a very good seed producer, leading all other annual varieties.

Early Korean 19604 matures two weeks earlier than Korean. However, under some conditions (about which little is known), it is affected by a bacterial disease which reduces the yield.

Common has produced sufficient seed, even in central Illinois, to maintain a stand. It seldom reaches a height of more than 5 or 6 inches.

Tennessee 76 and Kobe have yielded more hay and less seed than Korean. Tennessee 76 grows tall and erect.

Harbin is one of the earliest commercial strains in the United States, and makes poor growth.

Sericea grows larger than the annual types; but has not increased so rapidly in the United States as have the annual lespedezas because of the high price of the seed.

Lespedeza is used in Illinois mainly as a pasture crop. Its average carrying capacity is one mature horse or cow to the acre. Hogs and chickens do well when pastured on lespedeza.

Lespedeza will grow almost any place where

the season is long enough to allow it to mature. It is found in the United States from the Gulf of Mexico to the middle corn belt and from the Atlantic coast to the Great Plains. There is no place in Illinois where some variety will not mature; the late varieties, however, reseed only in the southern part of the state, where the growing season is longer.

GUARD AGAINST WEEDY SEED. The source of lespedeza seed is important since much of it is produced in the South where dodder is prevalent. By buying lespedeza seed only from reliable dealers or directly from a seed producer who has no dodder on his farm, the grower can be sure that he will have seed that is free from this weed. Certified seed can be had that is dodder-free. Other weed seeds prevalent in Illinois-grown seed (probably not so serious as dodder) are crabgrass, ragweed, rough buttonweed, smartweed, spiny sida, sedge, and witch grass.

Altho most of the seed of the annual varieties is sold unhulled, considerable hulled seed has recently appeared on the market. It is becoming popular largely because it can be cleaned more satisfactorily than unhulled seed.

Lespedeza seed should be purchased by the pound as there is no established standard weight per bushel.

Sericea has a reddish brown hull, with a lighter colored calyx, which divides into five sharp lobes extending about half the length of the seed. The seed is light green, usually sold with hull removed.

Harbin has a distinctly netted brownish gray hull. The sepals are often broken off in threshing, but when present extend less than half the length of the seed. The seed is dark purple, usually sold in the hull.

Korean has a grayish hull and a dark purple seed similar to Harbin. It is sold in the hull.

Common is enclosed in a reddish gray hull, which is retained on threshing. The calyx lobes extend more than half the length of the seed and adhere tightly to the hull. The hulled seed is dark purple with light irregular blotches and is much smaller than Korean.

Kobe has a gray hull with calyx lobes extending more than half the length of the seed. The unhulled seed is somewhat larger than that of other varieties; the hulled seed is reddish purple with greenish gray blotches and is larger than Common. The seed is sold in the hull.

Tennessee 76 has a reddish gray hull with calyx lobes extending more than half the length of the seed. The hulled seeds are similar in size

and color to those of Common. The seed is sold in the hull.—Circular No. 561.

Popcorn in Iowa

Practical information on varieties and cultural and harvesting methods involved in producing popcorn is set forth, with discussion of distribution and acreage, factors affecting popping expansion (E. S. R., 58, p. 430; 76, p. 32; 89, p. 40), and methods of popping. Brief report is made on variety, popping, and storage experiments, in Iowa Sta. Bul. P54, by J. C. Eldredge and P. J. Lyster.

Average yields (1932-33, 1935-37) ranged from 1,606 lbs. of shelled corn per acre from Japanese Hullless (now listed as White Hullless by large distributors) to 2,472 lbs. from White Rice and popping expansion from 14.5 for Spanish to 22.6 for Supergold (developed by A. M. Brunson).

Consumer tests preferred Tom Thumb and Japanese Hullless on flavor, freedom from hulls, and tenderness. Fertilizer treatments had no effect on popping expansion or eating quality. Inferior quality of corn bought in grocery stores was due in part to the starchy, large-kernelled, inferior varieties sold, but primarily to low moisture content.

Popcorn pops best at a moisture content between 12 and 13 per cent. Corn properly stored thru 14 years deteriorated only slightly in popping expansion. A slightly stale or rancid taste occasionally might be detected in corn 5 or 6 years old. Excess soft starch with a resulting poor popping expansion is commonly caused by immaturity, and freezing before maturity injures quality.

In storage tests, grain with the optimum moisture content became so dry within a week when stored in a heated room that it was unfit for popping. When shelled corn was stored in small lots under natural atmospheric conditions of humidity and temperature, the moisture and popping expansion fluctuated rather rapidly, and contrary to popular belief, did not remain in

Popcorn

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Seed Characteristics of Leading Varieties of Lespedeza

good popping condition. Corn in open containers in an ordinary room or kitchen cupboard during winter might be expected to lose its maximum popping expansion, due to drying, in 2 or 3 days.

Washington News

Sellers of linseed oil who have customarily allowed discounts for prompt payment must continue this practice, by amendment 9 to P.R.-53.

By interpretations 1 and 2 of L-221 the requirement that W.P.B. approve production schedules is abolished as to scheduling order M-293, electric motors and generators.

Order M-47 has been amended announcing that persons not having burlap quota certificate are nevertheless permitted to obtain burlap from specified sources under provisions of Order M-47.

The **Commodity Credit corporation** announced that wooden grain storage bins at country shipping points in southwestern Kansas will be made available on a rental basis for the handling of grain sorghums.

The ruling by Justice Jennings Bailey of the District Court for the District of Columbia that the W.P.B. has no power under the second war powers act to suspend an alleged violator of priority and allocation orders from doing business in restricted goods will be appealed by the W.P.B. it is said. The court said the W.L.B. could allocate and establish priority, but could not impose penalties.

Philip R. O'Brien, pres. of the Chicago Board of Trade, while in Washington Nov. 15 predicted the government would have to confiscate grain stocks from farms for live stock feeding and industrial purposes next year unless steps were taken immediately to "break the stalemate in the corn market." He told a reporter that the "easiest solution" would be to increase the ceiling price on corn at least 25 cents a bushel from the \$1.07 level at Chicago.

The government has bought so much burlap in India that the W.P.B. is able to announce food and feed industries will be assured of adequate supplies of bagging this year. According to government spokesmen, the food and feed industries will require approximately 550,000,000 bags. Use of burlap by sugar, salt and fertilizer industries has been denied. With these uses cut off, it is believed that other industrial consumers will be able to fill their needs.

California's Crop Reports

Sacramento, Cal., Nov. 12.—Reports from California growers as of Nov. 1, according to California Crop & Livestock Reporting Service indicated a crop of about 3,910,000 bus. of grain sorghums from 115,000 acres. This production represents the smallest crop that has been grown in California since 1939 and the second smallest since 1934. The preliminary estimates of the yield is 34.0 bus. per acre. The small production this year is the result of a 20% decline in the acreage from 1942. Last year 5,328,000 bus. were produced from 144,000 acres harvested.

Sacramento, Cal.—The preliminary estimate of California rice production on Nov. 1 was 12,155,000 bus. from 221,000 acres for harvest. This production represents a yield of 55.0 bus. per acre. Last year 11,592,000 bus. were produced from 207,000 acres harvested. The 10-year (1931-42) average crop has been 8,409,000 bus. from 121,000 acres. Growers made rapid progress in harvesting the California rice crop during October and operations are now well along.—Geo. A. Scott, Agr. Statistician, California Crop & Livestock Reporting Service.

Sacramento, Cal.—Harvesting of the California bean crop was well along by the close of October and a large part of the production is now in warehouses. Threshing weather has been very favorable throughout all sections of the State. On Nov. 1 the preliminary estimate is 5,332,000 bags, or 226,000 bags less than estimated a month ago. Reduced crop prospects this month were recorded in baby lima, small white, pink, blackeye, and pinto varieties. Estimates of production for all other varieties are about as anticipated prior to harvest.—Geo. A. Scott, Agr. Statistician, California Crop & Livestock Reporting Service.

Subsidy Losing

A vote is expected Nov. 29 on the bill introduced by Rep. Steagall to prohibit the payment of subsidies.

Section 3 of the bill extending the life of the Commodity Credit Corporation provides:

No funds appropriated to, borrowed by, or in the custody or control of any governmental agency (including any government-owned or government-controlled corporation) shall be directly or indirectly used by or made available to the Commodity Credit Corporation to make any subsidy or other payment, or to pay or absorb losses, on any agricultural commodity or any commodity processed or manufactured in whole or substantial part therefrom, including milk and livestock and the products thereof, either to reduce or maintain, or in lieu of increasing, maximum prices established on such commodities, except as provided in section 4 hereof:

Provided, that with respect to any such commodities for which subsidy programs or support prices have been announced on or before Oct. 13, 1943, such programs may be carried out and such support prices may continue to be maintained to the extent only that funds are available for such purpose under existing law, but not beyond Dec. 31, 1943:

Provided further, that support prices shall continue to be announced for any such commodities pursuant to section 4 of Public Law No. 147, approved July 1, 1941, and section 8 of Public Law No. 729, approved Oct. 2, 1942, but any maximum prices heretofore or hereafter established for such commodities shall not be below the support prices therefor or below the prices specified in section 3 of Public Law No. 729, approved Oct. 2, 1942.

The Senate Agriculture Committee last week heard more than 200 testifying, mostly in opposition to subsidy.

Even persons who might individually benefit by the subsidy fear that it will lead to complete regimentation of farming and industry. Some House members oppose subsidy as passing on present costs of living to coming generations, in taxes. Other congressmen declare subsidy would be used to cover up failure of the administration to increase food production.

Rep. Steagall, who delivered a speech on the bill Friday suffered a heart attack thereafter and died at 9:30 Monday.

Sales of government wheat for feed the second week of November amounted to 6,201,000 bus., bringing the total sales since July 1 to 172,997,762 bus. Of the domestic grain bought by the C.C.C. since July 1 10,196,800 bus. were bought by the Chicago regional office, 5,787,673 bus. by Kansas City and 3,640,961 bus. by Minneapolis.

Supply Trade

Suppliers who are required to keep inventory records under Limitation Order L-63 no longer need file Form WPB-825 (formerly PD-336), the War Production Board announced Nov. 12. Amendment of L-63 also provides that suppliers must keep records of total net monthly sales from stock and total inventory of supplies at the end of each month, but need not keep a separate record of each type of supplies. Another change made by revision clarified the meaning of the fourth exemption from the order by substituting the phrase "replacement parts specially designed to fit only one model and brand of machinery or equipment and adaptable to no other use" for the phrase "functional replacement parts for machinery and equipment." Supplies listed in the order include those for grain elevators; builders and constructions.

Conditions under which purchasers of Class B products may make allotments of controlled materials to Class B product producers were spelled out in Direction No. 36 to CMP Regulation No. 1, the W.P.B. announced Nov. 5. The Direction provides that customers may make allotments to Class B product manufacturers in two instances: Where the customer has obtained an allotment or material believing, in good faith, that he would make the product himself and finds that unforeseen contingencies prevent him from doing so and where the customer designs and engineers a product and it is his practice to subcontract for the production of all or a portion of products which he designs and engineers and the actual manufacturer is not in a position to anticipate requirements of materials or components for making it. These two cases are exceptions to the general rule which prohibits allotments of controlled materials to Class B product manufacturers except by the War Production Board.

"Recently we bought 50,000 tons of wheat and 12,000 tons of barley in Argentina and hope to get ships for additional quantities regularly during the next few months."—D. A. Fitzgerald, deputy director of food production in an address before New England feed men at Boston.



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Current Problems in Feeding Dairy Herd

By C. F. MONROE, associate, Dept. of Dairy Husbandry, Ohio Agr. Exp. Sta., before Ohio Animal Nutrition Conference

In view of the limited supply of feed, dairy-men should be encouraged to use the available feed to the best possible advantage, by keeping only those cows capable of a 300-pound fat production or better. Some cows may have to be eliminated, that better feeding and care of the remaining animals may result. Feed dealers can be of assistance in keeping up production by helping dairymen to procure the feed they need.

By nature the dairy cow is a roughage-consuming animal. If she is fed liberal quantities of good roughage, which includes pasture as well as hay and silage, rather moderate amounts of grain may be fed without markedly lowering production.

Composition of corn plants, in 100 pounds of dry weight

Variety	A	B
Ears	Lbs. 49.9	17.4
Stalks	Lbs. 23.3	41.6
Leaves	Lbs. 12.7	19.1
Husks	Lbs. 7.2	10.9
Sheaths	Lbs. 6.9	11.0

These figures were obtained in a study being conducted at the Ohio Agricultural Experiment Station. They are presented here to show how the character of silage may be affected by the kind of corn ensiled. Altho these figures represent extremes, such differences can and often do occur.

Variety A, a common grain hybrid, contained approximately three times the weight of ears of variety B, an open-pollinated silage corn. The other outstanding difference between these two varieties consisted in the proportion of stalks; the silage corn contained almost double the amount of the grain corn.

THE CURRENT YEAR may see many changes in the formulas for grain mixtures. Fortunately, the dairy cow seems to do equally well on a number of different kinds of feeds and different formulas. A representative of a large feed manufacturing concern, in commenting on the various changes that his company had been forced to make in their dairy concentrates, remarked, in a joking way, that the cows seemed to be doing about as well on the more or less improvised mixtures as they did on the pre-crisis mixtures, which admittedly were "the best." However, this is not as surprising as it may seem when one considers the number of different kinds of concentrate mixtures that have been used in the past and the experimental evidence that has been accumulating.

Ohio Station trials on simple v. complex grain mixtures showed that a grain mixture composed of ground corn and soybean oil meal gave results almost identical with those from a mixture containing a much greater variety of feeds. At the present time some cows on the Trumbull County Experiment farm are being fed on a simple ration composed of corn, oats, and soybean oil meal. This work is being conducted on a continuous-feeding basis, and some of the cows have received the simple grain mixture for almost 2 years. To date, these cows have performed satisfactorily and seem to be doing about as well as a similar group receiving a grain mixture containing a larger variety of ingredients.

THE CORNELL EXPERIMENTS on low-quality v. high-quality protein furnish additional evidence. No significant difference was obtained in the production. The low-quality protein mixture was composed mostly of corn and corn by-products, whereas the high-quality protein mixture contained in addition such feeds as linseed, cottonseed, and soybean oil meals.

The ability of the cow to produce well on grain mixtures presumably of inferior quality is also shown in the feeding trials involving the use of urea. This nonprotein source of nitrogen has compared favorably with the highly favored protein supplements when used in simple grain mixtures to furnish protein.

The explanation of this ability of the cow to utilize comparatively simple grain mixtures and "low-quality" protein feeds lies in the fact that the cow has the ability to process her own feeds and to consume large quantities of roughages. The dairy cow, like other ruminants, has a large compound stomach composed of four compartments, the first three of which are especially designed for processing feeds. The bacteria which are found in large numbers aid in the processing by assimilating the feed elements into their own bodies. Farther along in the digestive tract these bacteria are themselves digested by the cow. The consumption of large quantities of roughages means that the cow is less dependent on the concentrates than are non-ruminating animals. The roughages which a cow eats are important sources of vitamins, minerals, and feed nutrients.

FEEDING WHEAT.—Wheat can be used in the dairy ration, if and when it is available, to replace all or part of the corn normally used. Experiments at the Ohio Station have shown that the grain mixture may contain as high as 50 per cent wheat without adversely affecting production or the health of the animals. In fact, two cows receiving wheat as their only grain ration for a year appeared to suffer no ill effects. One of them ate a little more than 2 tons of wheat and the other, 1½ tons. Neither cow showed any signs of digestive disturbance or of developing a marked dislike for this grain. While on this ration, one cow, a Jersey, produced 9,824 pounds of milk and 474 pounds of butterfat, in the year; the other cow, also a Jersey, but naturally a low producer, made 274 pounds of butter fat in 278 days. There appears to be no reason to hesitate to use wheat in dairy grain mixtures. In fact, wheat that is off grade for milling purposes can frequently be used in the dairy ration. Wheat is only a partial replacement for wheat bran.

GROUND SHELLED CORN v. CORN-AND-COB MEAL.—Probably more corn is fed in dairy grain mixtures as corn-and-cob meal or ground ear corn than as ground shelled corn, especially where the home-grown grains are used as the base for the grain mixture. This use of ground ear corn is easier and saves the work of shelling the corn. Whether corn cobs have any feeding value and whether their use is beneficial are points that receive little consideration. In order to obtain some information on these points, two comparisons have been conducted.

The cows on shelled corn produced more milk, but of a slightly lower test, than the cows on the corn-and-cob meal mixture. The butterfat production was practically the same for both groups, as were also the liveweight gains. The differences between the groups in the production

as calculated on the 4 per cent basis are not significant. In these trials, the rate of production was fairly high, averaging close to 45 pounds of milk per day. The results indicate that ground corn cobs must have some feeding value even when roughages are liberally fed, as was done in these trials.

MINERAL SUPPLEMENTS.—Bonemeal, dicalcium phosphate, and other phosphorus-containing mineral supplements can be dispensed with in the dairy ration and used to a greater advantage in feeding other classes of livestock. In fact, the Pennsylvania experiments on feeding bone meal to cows averaging 12,000 pounds of 4 per cent milk a year showed no advantage for such feeding. Likewise, the Ohio Station failed to get an advantage for feeding dicalcium phosphate to cows producing around 10,500 pounds of 3.5 per cent milk. These findings are in accord with those from other states.

The addition of finely ground limestone or calcium carbonate is also not generally indicated. Such minerals are not replacements for the phosphorus-containing supplements. In fact, their use leads to an excess calcium in the ration. Altho cows are believed to be tolerant of a wide ratio of calcium to phosphorus in natural feeds, the deliberate addition of lime as a "mineral filler" would appear uncalled for.

At the present time, with the limited amount of phosphorus supplements available, greater use will be made of the rock sources of phosphorus. Special care should be taken to see that mineral mixtures do not exceed a fluorine content of 0.13 per cent as recommended by the National Research Council. Fluorine is poisonous to cattle and has a cumulative poisonous effect, even when small amounts are consumed over long periods of time. It is better to feed no mineral supplement than one that is unsafe.

Books Received

WAGE AND HOUR RECORDS, How to Keep Them, under the Fair Labor Standards Act, is a guide to employers simplifying the rules and calling for additional information. About one-fourth of the inspections made showed violations thru failure to keep prescribed records. A pamphlet of 31 pages obtainable from the U. S. Department of Labor, Wage and Hour Division, Washington, D. C.

Manufacturers of household brooms made wholly or partly of broom-corn have been allowed an increase in maximum prices amounting to three cents per pound on the total weight of the broom. This increase has been approved by the Director of the Office of Economic Stabilization and was granted by OPA to reflect recently established ceiling prices for broom corn.

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Feedstuffs

Brewers Dried Grains production during October amounted to 20,400 tons, against 19,300 tons in October, 1942, as reported by the F. D. A.

Manhattan, Kan.—This winter the usual nutrition short course for feed dealers and manufacturers will not be held by the Kansas State College.

Cottonseed cake and meal on hand Oct. 31 amounted to 57,000 tons, against 133,000 tons on the like date last year, according to the Bureau of the Census.

Distillers Dried Grains production during October totaled 32,800 tons, against 31,800 tons during October a year ago, as reported by the Food Distribution Administration.

Cayuga, N. Y.—The Beacon Milling Co. has agreed with the Federal Trade Commission to desist from using the terms "meat" or "beef," unqualified, in advertising its dog and puppy meal.

Specific dollars and cents ceilings will be imposed shortly on brewers' dried grains and malt sprouts, the Office of Price Administration said Nov. 10 after meeting with representatives of the industry to discuss mechanics of the proposed order.

Peoria, Ill.—The Midwestern Feed Mixers Ass'n has succeeded the Independent Feed Mixers Ass'n of Illinois. Pres. of the reorganized Ass'n is D. D. DeForest, Galesburg; vice pres., Louis C. Abenbrick, Edwardsville, and sec'y-treas., Ross Wakey, Osco, Ill. Annual dues are \$10.

Buffalo, N. Y.—Millions of bushels of sorghum are pouring into Buffalo, to be ground up and put in chicken and animal feeds, to take the place of ground corn, which is next to impossible to obtain. One day this week 50 cars bearing more than 2000 tons of sorghum arrived in Buffalo from Texas and Oklahoma. Sorghum sells in Buffalo for around \$1.60 a bushel.—G. E. T.

Washington, D. C.—The Washington office of the Grain & Feed Dealers National Ass'n has been putting forth every effort to secure from O.P.A. a modification of its ruling denying C gasoline cards for feed service men. W.F.A. realizes the seriousness of the situation. It is hoped some relief will be granted. On recommendation of W.F.A. feed service men are to be allotted additional quantities of gasoline, O.P.A. rationing division said Nov. 19.

Definitions by Control Officials

At the annual meeting of the American Ass'n of Feed Control Officials at Washington, Oct. 29, 30, the executive committee presented a resolution concerning the labeling of poultry feeds containing urea. The following legend is required: "This feed contains urea for a claimed treatment and preventative of coccidiosis. The nitrogen content of urea is not considered in the formulation of the protein guarantee and for protein check purposes the combined ammoniacal and urea nitrogen content must be deducted from the total nitrogen content."

In the absence of a formal report by the investigator on corn chop and related products, and also in view of the action of the Office of Price Administration in relation to this subject, the executive committee moved the adoption of the following definition as tentative:

"Ear corn chops with husks is corn, cob, and husks chopped, with no greater proportion of cob and husks than occurs in the ear corn in its natural state."

Our Feed Supplies and Demands

By J. H. BURRELL, of Ralston Purina Co., at Purdue Nutrition School.

It has been estimated there will be a shortage of feedstuffs for 1944 of about 15 per cent to 20 per cent. Early frosts may cause lots of soft corn and further curtail the small movement of corn to markets. Commercial stocks of corn are down to only 5 million bushels compared with 50 million bushels in Mar., 1943.

Oilmeal and cake supplies are expected to be large in 1944, but carryover stocks will be much smaller. 600,000 tons of soybean meal is scheduled to be used for food. The total supply of oilmeal available for feed is expected to be slightly larger than in 1943.

Supplies of animal proteins in 1944 will again be much smaller than the requirements of livestock. Some imports of animal proteins have been arranged, but this amount will not bring the total up to our requirements.

There are a few things which should be done to balance our animal and poultry needs with our feed supplies:

Reduce at once the number of animals and birds on farms.

Eliminate waste of feed. Feeding only productive animals and birds will prevent feed waste.

Start now to raise better poultry that will live long enough to make a profit for the owners.

Wheat ground by the mills during the first nine months of 1943 totaled 384,660,883 bus., against 358,235,397 during the like period of 1942, as reported by the Bureau of the Census.

Distribution of Feed Wheat in New England

D. A. FitzGerald, deputy director of food production, in addressing New England feed men at a meeting in Boston, said:

Recently, a more formal procedure for allocating and distributing feed wheat in the Northeast was worked out at a meeting of representatives of the Commodity Credit Corporation and the Lower Lakes Grain Committee. The plan provides, first for classifying the users of CCC feed wheat in the territory North and Northeast of a line extending from Buffalo to Baltimore, the area served by the Buffalo Gateway, into three groups: (1) Buffalo feed mills. (2) feed mixers outside of Buffalo, and (3) country batch mixers, dealers and carlot buyers.

Each month the committee will allocate the quantity of feed wheat available for such month among the three groups on the basis of each group's requirements and, in addition, will make individual allotments for the mixers in groups 1 and 2. Sales of wheat by the Commodity Credit Corporation to the individual mixers will be made in accordance with the allotments furnished by the Lower Lakes Grain Committee.

Final decision on the way in which sales will be made to the members of group 3 has not yet been reached. There are about 2500 country batch mixers, dealers and carlot buyers in the Northeast States. Possibly, sales to the members of this group could be made on the recommendations of the County War Boards.

For some months, the Commodity Credit Corporation has been selling feed wheat in the Northeast at the rate of approximately 6 million bushels a month.

Substitutions for War Scarce Feedstuffs

By T. S. SUTTON, before Ohio Animal Nutrition Conference

Shortages of ingredient materials, difficulties in distribution, price ceilings, etc., have forced substitutions in feed formulae. The present outlook indicates that this situation may become more acute.

GUARANTEED ANALYSIS.—Before moving on to the discussion of carbohydrate substitutions, it might be well to mention the matter of "guaranteed analysis." Regardless of what substitutions are made attention must be given to the maintenance of the "guaranty." This holds for items other than those that are carbohydrate in nature as well as those that are carbohydrate. Since cereal grains, oil bearing seeds, and byproduct materials vary in chemical composition, difficulties in maintaining guaranties are encountered. The mastery of the problem depends upon the availability of reliable information on the chemical composition of the ingredients used and the application of simple mathematics. When the necessary information is not available or unreliable the only alternative is the services of an analytical laboratory.

A second problem in the making of substitutions is the maintenance of feeding value. This problem is somewhat more intangible than that of guaranteed analyses and I presume one which causes a great deal more worry. If a mixed feed, even though it passes the test of chemical analysis, is not palatable or for some reason does not produce results in terms of growth, milk production, egg production, market finish, etc., it immediately meets with criticism. Therefore, the challenging problem is to make substitutions in mixed feed ingredients with a minimum of variation in feeding value.

We are rather rapidly learning that many substitutions formerly considered impossible without disastrous results are merely traditions based on opinion rather than fact.

The feeds normally consumed by our livestock are varied and consist of a complex of nutrient sources. This fact in itself allows drastic substitutions in a part of the feed consumed without marked differences in performance. This is especially true in the case of roughage consuming animals, and even of basic significance where abundant good quality forage is provided to animals not usually considered as roughage consumers. For example, swine being fattened on abundant pasture, or poultry on good forage range.

CARBOHYDRATES; SOURCES AND FUNCTION.—The group of foodstuffs called carbohydrates includes the sugars, starch, cellulose, gums and related compounds. In the ordinary feed analysis these carbohydrate materials are included in the fiber and nitrogen-free extract. From the standpoint of feeding value this a fortunate division, since the nitrogen-free extract consists of the more easily digested portion of the carbohydrates and the fiber, the less-digestible portion. The nitrogen-free extract of different feedstuffs varies a little in actual nutritive value. This is because of differences in digestibility rather than because of differences in actual utilization by the animal. For example, the nitrogen-free extract of roughages is of somewhat lower feeding value than the nitrogen-free extract of concentrates because of lower digestibility due to higher hemicellulose content.

Carbohydrates are used by the animal body as a source of energy. This may be energy for immediate body needs, such as keeping the body warm; energy for temporary storage, as glycogen or animal starch in the liver and muscle; or for more permanent storage as fat in the fat deposits of the body. Regardless of the final use, the sole function of this important feed constituent is as a source of energy, and a given weight of digestible carbohydrate from one source is worth just exactly as much as a

similar weight of digestible carbohydrate from any other source from an energy standpoint. A pound of digestible carbohydrate from wheat, barley or rye is worth just exactly as much (no more and no less) as a pound of digestible carbohydrate from corn.

With the facts in mind, the problem of carbohydrate substitutions becomes a relatively simple one, and where differences in the performance of animals result from making substitutions, the cause should be looked for elsewhere provided the percentages of fiber and nitrogen-free extract are held constant when the substitution is made. The practical problem is usually that of substituting something for corn when corn is not available. The substitution to be made may be a partial or complete replacement. For example, corn may be entirely replaced by ground wheat in the swine ration, opinions to the contrary, notwithstanding. As a matter of fact, in most trials wheat has given better results when directly compared with corn. Wheat that is of such poor quality that it is unfit for milling may be nearly equal to high grade wheat in feeding value. The use that should be made of the large amount of low grade wheat harvested in Ohio this past season is obvious.

If complete replacement will work then there should be no hesitancy in making partial replacement. On the other hand, there are instances where partial replacements are recommended. For instance, altho rye and wheat are both similar in composition to corn, rye will give better results if used with an equal or preferably a larger amount of other grain. This is chiefly because of rye being unpalatable.

The above examples are used to illustrate two general principles. Namely: (1) where the chemical composition of the feed is maintained, substitutions of carbohydrate carriers can almost be made with impunity. (2) Feeds that are unpalatable are best utilized by making partial substitutions.

The real problem in making substitutions is in maintaining protein, vitamin and mineral values.

Limiting Tankage Grinding Charge

Effective Nov. 15 the O.P.A. has issued a regulation controlling the prices of animal product feedingstuffs to change the definition of dry rendered tankage, to reinstate a provision limiting the amount which can be paid for custom grinding of tankage and to permit the addition of actual cost of bags to maximum prices when tankage products are sold sacked.

The regulation as amended says that dry rendered tankage is the dry rendered residue from animal tissues exclusive of hoof, horn, manure and stomach contents, except in such cases as might unavoidably occur in good factory practice. It must not contain more than 15 per cent fat.

The new provision on custom grinding says that the maximum service charge of a grinder for converting dry or wet rendered tankage into meat scraps or digester tankage must be so limited that the cost of these products to any buyer at his receiving point shall not exceed the maximum price for a like quantity and quality delivered to the same receiving point by a processor whose production plant is situated in the city where the custom grinder is situated.

Another change corrects a pricing which had been made on the basis of units of ammonia to a basis of percentage of protein. It does not change the prices.

The changes were effected through Amendment No. 5 to Revised Maximum Price Regulation No. 74 (Animal Product Feedingstuffs).

The Supreme Court of the United States on Nov. 22 refused to review a decision holding constitutional a provision of the Michigan unemployment compensation act applying the legislation to concerns under the same management or ownership if more than 8 are employed.

Contemplated Oil Meal Restrictions

Restrictions on the sale, shipment and inventories of oil seed meal and animal protein feeds have been prepared by the War Food Administration as a revision of Food Production Order No. 9 and are soon to be promulgated despite the vigorous opposition of small and large feed mixers and manufacturers. The salient provisions are:

Set-aside requirement. Any processor or grinder shall, when so ordered by the director and within such period of time as the director may specify, set aside for sale to the Commodity Credit Corp. or to such other person as the director may designate, and deliver into such area as the director may designate, not more than 20% of the quantity of oil seed meal produced or ground by him during the period covered by the order; provided, that the period within which such quantity is required to be set aside shall not commence before the 31st day following the date of the issuance of such order.

LIMITATION ON PRODUCERS.—Limitation on acquisition of oilseed meal by cottonseed and soybean producers. No producer of cottonseed or soybeans shall, with respect to the conditional sale of cottonseed or soybeans, or the exchange of cottonseed or soybeans for oil seed meal, acquire any quantity of oil seed meal which, when added to the quantity of oil seed meal previously acquired by him during the current feeding year, would exceed the quantity of oil seed meal that is required by him during the current feeding year for the feeding of livestock and poultry on his farm.

Limitations on mixed feed manufacturers. During the period from Oct. 1, 1943, to Sept. 30, 1944, inclusive, no mixed feed manufacturer shall use any quantity of oil seed meal in the manufacture of mixed feeds, which, when added to the quantity of oil seed meal previously acquired by him for such purpose, would be in excess of 110% of the quantity of oil seed meal which he used in the manufacture of mixed feeds during the 1942 calendar year; and no mixed feed manufacturer shall use any quantity of oil seed meal in the manufacture of mixed feeds, during any consecutive three months' period between Oct. 1, 1943, and Sept. 30, 1944, inclusive, in excess of 110% of the quantity of oil seed meal so used for the manufacture of

mixed feeds during the highest three consecutive months of the 1942 calendar year.

PROHIBITION ON GRITS.—Prohibition on sale, purchase and use of soybean products, other than soybean meal, cake or pellets for feed. No person shall sell or deliver and no person shall purchase or accept delivery of soy flour, grits or similar edible products of soybeans, other than soybean meal, cake or pellets, for use as or manufacture into feed, and no such products shall be used as or manufactured into feed.

Processors' Inventories. If the director shall so order, no processor shall at any time after 30 days from the issuance of such order acquire as unsold inventory of oil seed meal in excess of either:

The quantity produced by him during the 15 days on which he last produced oil seed meal, or

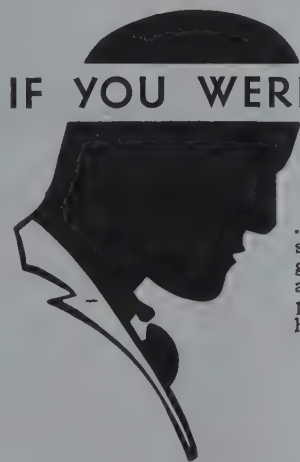
His inventory of oil seed meal on the corresponding day of the feeding year 1941-42, whichever quantity is greater.

Protest Oil Meal Order

The Midwestern Feed Mixers Ass'n, of which D. D. DeForest of Galesburg, Ill., is president, urges feed mixers to wire the W.F.A. in opposition to Revision No. 3 of Food Production Order No. 9 covering oil seed meals now being proposed for immediate adoption by the W.F.A. The following message has been addressed by the Ass'n to all independent feed mixers:

The priority given growers of soybeans and cotton seed will freeze the meals in the local area of production and further disrupt the flow of these materials to the feeders of the country. This will result in rendering meaningless the proposed allotment of oil meals to feed processors and handlers and be disastrous to countless feeders depending on these established sources of supply. We agree with the directors of American Feed Manufacturers Ass'n in special session recently and join them in recognizing the peril to the war food program in this critical situation and request that you wire J. B. Hutson, director of Food Production, Washington, at once urging an interim period of at least 30 days for further study.

Enrichment of all white flour sold for household use will be required by an order soon to be issued by the W.F.A.



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War-Time Shifts in Poultry Rations

By C. W. CARRICK, Department of Poultry Husbandry, Purdue University, at Purdue Nutrition School

It is obvious that continued adjustments in poultry rations will be necessary for some time to come. In some cases certain nutritional factors may be reduced and still meet the minimum requirements for maximum production. On the other hand, reduction below the critical point may result in inefficiency and actual waste of feed. While standards for percentages and units per 100 grams are useful as guides, we must not forget the influence of season, or more specifically temperature, upon the total intake of food. Intake may be more important sometimes than proportions of proteins, vitamins, and minerals in determining the nutrients utilized, even tho intake may not be as easily controlled as proportions.

In this discussion we shall think in terms of the ration, meaning the total intake, so that any figures we use do not apply to mashes when grains are fed separately, and mashes would therefore have to be adjusted according to the amount of grain to be fed.

The usual accepted standard for protein in laying rations is about 15 to 16 per cent, but it is obvious that with a greater intake of feed in winter, other things being equal, much more protein would be consumed in cool weather than in warm. Sometimes the weekly summer feed intake of layers may be only two-thirds that of the same hens in winter. While suitable standards for seasonal differences are not available, it is well to bear in mind that lower proportions of non-energy factors (protein, vitamins, minerals) can be supplied in the laying ration in winter than in summer, without lowering the intake of these factors below the critical point.

IN OUR CHICK EXPERIMENTS we have found that starting rations relatively low in protein and vitamins may give just as good growing in winter as rations higher in these factors, while in summer there is a definite difference in growth rate when the two types of rations are compared. In general, we have recently been recommending starting ration with 17 to 18 per cent protein for chicks hatched before April 1, while after that date starters with 19 to 21 per cent protein are specified when the chicks are to be reared for layers. The higher protein starters are recommended for chicks hatched any time when they are to be grown for meat and rapid growth is desirable.

Recent experiments here have shown the importance of starters which give relatively good growth during the first four or six weeks. After these ages cheaper rations with less protein and vitamin feeds can be fed with just as good growth results as when the high protein starters are continued.

Only about 20 per cent of the total feed intake for the 12-week period was consumed during the first six weeks, while 80 per cent was consumed from 6 to 12 weeks of age. About one-third of the feed for the 12-week period was consumed during the 11th and 12th weeks. During the first six weeks 20 per cent protein starters were fed, while after six weeks the ration was reduced to 16 per cent protein by adding 50 pounds of ground corn to 100 pounds of the original starting ration and adjusting for minerals and vitamin D.

These experiments indicate that relatively high protein (20 per cent) and vitamin rations are desirable during the first few weeks, but that there is no need to continue fast-growing starting rations after the chicks get a good start. This does not mean that deficiencies or neglect are desirable. Altho these experiments were carried on during the winter months, the principle of reduction in critical materials for rapid growth after a few weeks applies for spring hatched chicks, which will be grown out during the summer months. Costs and critical feeds required may be further reduced during the

rearing period by the use of good pastures or green succulent plants which are cut and then fed to the chickens.

ANIMAL PROTEIN FEEDS, such as packing-house by-products, fish meal and milk products, under present conditions are to be regarded primarily as vitamin supplements and that large quantities of their protein are not essential, however good they may be. Properly processed soybean oil meal is adequate in protein quality, but inadequate in some of the vitamins and minerals supplied by animal products.

Since soybean oil meal is the principal protein carrier available in this area, it will be the primary protein supplement in most poultry rations. When available, corn gluten meal, cottonseed meal and other oil meals may be used to a limited extent to replace some of the soybean meal, but with the facts available at present it seems advisable that not more than one-third of the soybean meal protein should be replaced with other vegetable proteins, and that this much replacement is better when at least three per cent of either meat scraps, or fish meal, or dried milk are included in the ration. When three per cent of meat or fish products are included in a soybean meal—corn ration the principal B-complex vitamin deficiency is riboflavin. This vitamin is usually supplied by milk or whey products, alfalfa leaf meal, etc., but with a shortage of these feeds at present it may be practical to add some synthetic riboflavin to bring up the amount needed in the ration. It costs about \$225 to \$250 per pound, which sounds high, but 100 units per 100 grams of feed—about all that would be needed in most otherwise practical rations—can be added at a cost of about 50 cents per ton of ration. This is not to say that pure riboflavin will replace milk or whey products, because such products contain other vitamins which are just as essential and must be supplied from some source in adequate amounts. Furthermore, we cannot assume that all of the vitamins of milk are known and their nature understood, much less the quantities needed for poultry.

VITAMIN B.—Products having B-complex vitamin values with which we have been working recently include whey solubles (resulting when most of the albumen and lactose are removed from whey, distillery residues, and condensed fish press water. Each of these has a place in supplementing corn and soybean meal with B-complex vitamins, and may be considered for poultry rations when available. However, no one of them is a complete substitute for another. For example, whey solubles is low in choline and niacin, but relatively high in riboflavin and pantothenic acid. Distillers dried solubles are low in pantothenic acid but relatively a good source of niacin, riboflavin, and in some samples a fair source of choline. Condensed fish press water at a two per cent level in chick rations is an excellent supplement for

all of these vitamins mentioned, except riboflavin. It is apparent then that these materials are most practical in combination with other supplements supply their deficiencies, rather than as sole supplements. Corn and soybean oil meal are deficient in all of these B-complex factors mentioned and perhaps in others less understood.

CHOLINE deserves some special comment at this time. It is an old compound whose composition has been known for many years by physiological chemists, but only recently has its nutritional significance begun to be recognized. It is now accepted that it is necessary for chickens for both growth and the prevention of slipped tendons. This vitamin may also play a part in the formation of the essential

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amino acid methionine, by the transfer of its labile methyl group (CH_3) which reacts with the amino acid cystine.

Chick rations containing 50 per cent or more of yellow corn, 30 per cent or more of soybean oil meal, 5 per cent of alfalfa, 0.5 per cent of whey solubles or 5 per cent of distillers solubles, a suitable mineral addition, a vitamin D supplement, and other B-complex vitamins besides choline, will give relatively slow growth. But a marked increase in growth results when 0.15 per cent of choline chloride is included in the same diet. Increased growth is also obtained from similar diets by adding crude lecithin (prepared from the "settlings" of soybean oil), from which choline may be derived, or a small amount of d-l methionine.

The addition of three per cent of meat and bone scraps also gives a similar increase in growth. When analysed, the meat and bone scraps show relatively little choline, which would indicate methionine is the factor really involved.

HEAT TREATMENT OF SOY MEAL.—

Investigations at the Wisconsin Station some years ago indicated that suitable heat treatment increased the availability of methionine in soybean oil meal. In a comparison of some seven different samples of soybean oil meal from different processes and plants we found one sample of expeller meal which when fed at a 35 per cent level in the ration gave as rapid growth without choline as with it. Another sample of cold pressed meal (but precooked) was satisfactory at a 30 per cent level. Other samples of expeller and solvent meals varied, but gave significantly slower growth without choline. In all of these comparisons a level of 5 per cent of distillers' dried solubles was included in the diet, and this product is known to be a fair source of choline. The kind of process does not seem to be a dependable guide at present.

What does it all mean? It indicates that soybean oil meals vary probably in their methionine content, but that the methionine deficiency in corn and soybean meal rations can be corrected by choline. In some soybean meals fed at high levels, five per cent of distillers' solubles will correct the deficiency. In most meals three per cent of meat and bone scraps or two per cent of condensed fish press water, or 0.15 to 0.20 per cent of choline chloride will probably correct the deficiency. Methionine will also correct the deficiency, but it is entirely too expensive. Choline chloride is now selling for as little as \$3 per pound, so that it may find a practical place in some poultry rations, at least during the shortage of certain natural products. It would take about three pounds of choline, at a cost of \$9 to add 0.15 per cent of choline to a ton of feed. The amount needed would actually depend upon the choline content of the ration, with a safe allowance for variation.

Last year we reported that fowls on good pasture obtained ample supplies of all vitamins necessary for good egg production and high hatchability. The same is apparently true for growing stock. Further trials with layers indicate that mashes of ground corn, soybean oil meal and mineral corrections give excellent results when fed with either corn or wheat. There is, in my opinion, a place for mashes designed to be fed to fowls on pasture.

CONSERVATION OF FISH OILS for vitamin A seem necessary at the present time. When chick rations contain 50 per cent or more of yellow corn and three per cent or more of alfalfa leaf meal or equivalent products, the vitamin A requirements for young chickens are met, even when grown in confinement. Vitamin D can be conveniently and economically supplied by irradiated animal sterols, which we are told will be available in ample quantities. Thus, much fish oil can be conserved for breeding hens, for which the vitamin A requirements are much higher.

The shortage of meat and bone scraps and bone meal has created a critical phosphorus problem. Recent work at Purdue with young chickens indicates that with rations containing

80 per cent of corn and soybean meal, about one to 1.5 per cent of bone meal supplies ample phosphorus, *provided* the calcium content of the ration is adjusted to about 0.90 to 1.00 per cent, and *provided* that ample vitamin D is supplied by either sunshine or concentrates. In our indoor experiments 150 units of vitamin D per 100 grams of feed was supplied by D-activated animal sterol. No rickets appeared even when no bone was added, but growth rate was reduced.

HIGH CALCIUM LIMESTONE or equivalent materials may be used for adjusting calcium. Some phosphatic rock products treated to remove excess fluorine also are available in increasing quantities. Both bone and rock phosphate products should be kept at a minimum and the old standards for phosphorus abandoned. Mature fowls probably require no more phosphorus than young stock.

We might sum up our views by saying that corn and soybean oil meal will still supply the main part of our poultry rations. Yellow corn may be replaced partly by wheat, barley, oats, or sorghum grains. Soybean meal may be replaced up to one-third with corn gluten meal and other vegetable protein concentrates. It is still advisable, where possible, to include a minimum of 3 per cent of meat and bone scraps or fish meal or both combined, 2 per cent or more of whey or milk products, 3 per cent or more of alfalfa leaf meal, and 5 per cent each of wheat bran and middlings in the rations. When obtainable, special vitamin products such as whey derivatives, distillery residues, fish press water or synthetic vitamins may prove practical in corn and soybean meal rations. D-activated animal sterols should be utilized for starting chicks and laying fowls to conserve fish oils for breeding fowls without pasture.

Acorns Color Yolks

M. W. Olson tells of single comb white Leghorn hens confined to individual cages and fed rations containing 25 to 50% ground acorn meats, 25% ground acorn hulls, and 25% whole acorns from white oaks that produced eggs with olive yolks after four to five days' feeding.

Similar results were obtained on yolk color when whole acorns from black oaks were fed. Of 58 eggs with olive yolks 60% of the fertile eggs hatched, whereas 79% of fertile eggs with yellow yolks developed normally.—*Poultry Science*.

Pennsylvania Poultry Conference

An attendance of more than 250 from eight states listened to a varied program at the 22d annual poultry conference held Oct. 26-28 at State College, Pa., under the sponsorship of the Pennsylvania State College and the Pennsylvania State Poultry Ass'n.

The meetings were opened with laboratory demonstration of basic anatomy and physiology by E. W. Callenbach and P. H. Margolf.

B. W. Fairbanks, professor of animal husbandry, University of Illinois, said that since protein supplements conserve corn there should be no further reduction in the levels of protein recommended. He stressed the value of pastures.

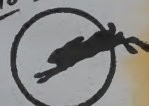
Other speakers were J. E. Hunter of the Allied Mills, Leon Todd, managing director of the Northeastern Poultry Producers Council, Trenton, N. J.; W. D. McMillan, research director of the G.L.F., Ithaca, N. Y.; H. R. Bird, associate professor of poultry husbandry,

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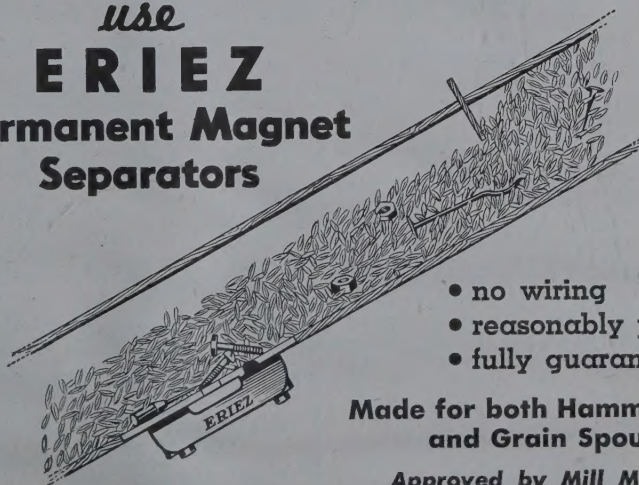
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University of Maryland; R. V. Boucher on riboflavin and vitamin requirements; Fred V. Grun, J. W. Kinghorn of the F.D.A., Washington, D. C., and many others.

Soft Corn Valuable as Feed

Two questions frequently asked in South Dakota during the late fall of 1942 were "To what class of livestock can I best feed my soft corn?" and "What is its value?" A heavy frost (an actual freeze with a temperature of 22° F.) caught a large amount of immature corn in the eastern part of the state on Sept. 24. When this corn was harvested, it could not be sold at a satisfactory price and there were about as many opinions as to its actual value per bushel as there were farmers who had produced it. In their desire to use the full growing season, some farmers had planted varieties of corn which are easily damaged by frosts, such as late-maturing hybrids. These hybrids are more likely to be damaged occasionally by frost than are the early-adapted varieties, which have become more important in this state with the increased acreage devoted to hybrid corn.

In order to answer the questions on the value

The protein mixture was self-fed to all lots except the one summer-farrowed lot mentioned above that was fed soft ear corn and the same amount of protein that had been self-fed with hard shelled corn to another summer-farrowed lot. This one lot was limited in protein because it was thought that pigs fed soft corn might consume a larger amount of protein supplement than those fed hard corn. All hard corn fed came from the same supply.

A producer who unfortunately has soft corn will obtain a greater return for it by feeding it to livestock than by selling it as cash grain.

The following amounts of soft ear corn and supplemental feeds or roughage were needed by the different classes of livestock to equal 100 pounds of No. 3 ear corn in feeding value: yearling steers, 121 pounds of soft ear corn less 2 pounds of alfalfa hay; steer calves, 125 pounds of soft ear corn less 1 pound of alfalfa hay; pigs, 121 pounds of soft ear corn plus 2 pounds of protein supplement; and lambs, 135 pounds of soft ear corn plus 7 pounds of alfalfa hay. Hogs fed soft shelled corn required 108 pounds of this feed plus 1 pound of protein supplement to equal 100 pounds of hard shelled corn.



Left—Typical Soft Corn Fed. At right—Typical Hard Corn Fed.

of soft corn and what animals can utilize it best, the experiment reported in this circular was begun at the South Dakota Station in December, 1942, and January, 1943.

LIVESTOCK FED. The different classes of livestock used were as follows:

CATTLE: Two lots of yearling steers grading medium to choice and two lots of steer calves grading good to choice, 10 head in each lot.

HOGS: Six lots of good to choice feeder pigs, 10 head in each lot.

LAMBS: Two lots of good to choice feeder lambs, 20 head in each lot.

HOGS UTILIZED SOFT CORN WELL.

—The work with hogs was divided into two phases, one involving pigs farrowed in the summer and the other younger pigs farrowed in the fall. All were fed protein supplement, mineral, and alfalfa hay in addition to corn. Forty summer-farrowed pigs weighing approximately 120 pounds each were divided into four lots—one was fed hard shelled corn, one was fed hard ear corn, one soft ear corn with protein supplement self-fed, and one soft ear corn with protein supplement limited to the amount fed with the hard shelled corn. These pigs were started on feed Dec. 30, 1942, and were fed on outside concrete floors on the south side of the hog house. The second phase of the work was with 20 fall-farrowed pigs averaging 73 pounds each. They were divided into two lots—one was fed hard shelled corn and the other soft shelled corn. These pigs were put on feed Feb. 5, 1943, and were fed on inside concrete floors.

Alfalfa hay and mineral were self-fed to all lots, and the shelled corn was also self-fed.

Based on the data presented here, soft ear corn was utilized best by yearling steers and then by steer calves, hogs, and lambs, as shown below. Fed to the different classes of animals listed, it had the following values per hundredweight when compared with No. 3 ear corn, with alfalfa hay valued at \$10 a ton and protein supplement at \$60 a ton.

Prices of No. 3 ear corn	Value per hundredweight of soft ear corn* when fed to—			
	Yearling steers	Steer calves	Hogs	Lambs
\$0.50 per cwt. (35c per bus.)	\$0.42	\$0.49	\$0.36	\$0.34
\$0.75 per cwt. (52½c per bus.)	.63	.60	.57	.53
\$1.00 per cwt. (70c per bus.)	.83	.80	.78	.71
\$1.25 per cwt. (87½c per bus.)	1.04	1.00	.98	.90

*This corn contained about 25 per cent moisture when shelled.

Soft ear corn was stored economically during fall and winter months in long uncovered

piles on the ground under South Dakota conditions without heating. Snow and rain did not appear to greatly affect its palatability or feeding value when so stored.

Soft corn was fed without any special preparation such as drying, salting, shelling, crushing, and grinding. Shelled soft corn and ground soft ear corn were exceedingly difficult to store

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as they heated readily and further molds developed. The heated soft shelled corn was not as palatable to pigs as the nonheated soft ear corn.

The gains of both cattle and hogs on soft corn when compared to those on hard corn were reduced following the beginning of the warmer weather of April. Thus it appears that early utilization of soft corn is desirable.

In a palatability test, soft, moldy ear corn was more palatable to 44 head of stocker cattle than hard ear corn. When both kinds of corn were available in separate feed bunks, the soft corn was always the first to be consumed.

No bad effects occurred from shifting cattle from a full feed of hard shelled corn and barley to a full feed of soft, moldy ear corn. In an observation test, 29 steers that had been on full feed on the above ration were shifted in 5 days to a full feed of the soft ear corn without going off feed or showing any bad effects. The steers were fed the soft corn ration for 4 weeks and they continued to make good gains throughout the period.

In a "lambing-off" feeding experiment conducted in the fall of 1942 at this Station, lambs harvested soft ear corn in the field very efficiently without showing any signs of digestive disturbances.

The results herein presented are to be regarded as a progress report as they represent only one year's feeding trials. The Experiment Station planted an acreage to late-maturing corn this year to assure soft corn for another year's feeding trials to check the foregoing results.—Circular 48, So. Dak. Agr. Exp. Sta.

Alaska Tankage Is "Imported"

Effective Nov. 9 the O.P.A. by amendments to schedules 73 and 74 has ruled that Alaskan fish meal or scrap and Alaskan dry rendered tankage and other animal product feedingstuffs sold within the United States are to be considered "imported" products for the purpose of allowing them the same maximum prices as similar products produced in a foreign country.

Beware Excess Fluorine

By V. O. WOLCOTT, chief, California Bureau of Field Crops

As the shortage of bone meal becomes acute, it is necessary to seek other sources of phosphorus among the mineral phosphates. Defluorinated rock phosphate and phosphatic clay are acceptable sources now appearing on the market.

Phosphatic clay has been marketed under the term "colloidal phosphate," which term is not official for the labeling of feeding stuffs. Both of these materials contain fluorine, but the amount present is not sufficient to condemn them altho caution is necessary in their use. Fluorine content must not exceed established tolerances.

The Feed Laboratory has analyzed five samples of phosphatic clay with the following results:

	Range	Average
Calcium	16.5 -20.0	18.37
Phosphorus	8.1 -11.3	9.68
Fluorine	1.10- 1.80	1.41

It will be noted that the phosphorus content is less than that of bone and more of it would have to be used in order to supply the same phosphorus content as the bone which is now used in formulae. We do not have a complete analysis of defluorinated rock phosphate, but the phosphorus content is reported at 13% to 15.5%, which is approximately the same as that of bone meal.

In connection with the use of these materials or other similar materials which may appear as substitutes for bone, we should like to offer the following suggestions which will be to the advantage of all concerned:

1. Do not buy or use any mineral phosphate whose fluorine content is not guaranteed.
2. Use mineral phosphates as a partial substitute in combination with some bone. This will reduce the amount used in the mash or mineral feed.
3. As a precautionary measure, before using any of these materials, consult our Sacramento Office of the Feed Control Laboratory regarding

their use stating the product; the amount to be used, and other information which may be of value.

It is our desire to co-operate with the industry in seeking solutions to present shortages and we are always ready for consultation regarding the use of any material.

Meeting the Vitamin Deficiencies of Beef Cattle, Sheep and Hogs

By C. L. SHREWSBURY, Department of Agricultural Chemistry, Purdue University, at Purdue Nutrition School.

With large numbers of animals to be fed and with only slightly increased total feed supplies, the main effort should be to distribute the vitamin containing feeds to those animals that have the greatest need and to make the best possible use of pasture to increase the stores of vitamins in the animals.

Beef cattle can be maintained on feeds relatively poor in vitamins and it is here that use should be made of the lower quality roughages.

Sheep require better roughages to supply both the known and unknown vitamins. Lambs, especially, need the higher quality roughages, and ewes during gestation and lactation.

Swine are likely to suffer more from insufficient total intake of vitamins, particularly those associated with animal protein feeds than any other class of livestock. Distribution of high vitamin feeds to brood sows and young pigs would seem to be the solution of this problem. Attention should be given to supplying Vitamin D, either as irradiated yeast or as sun-cured alfalfa.

Additional shortages will occur in phosphorus and possibly iodine. Defluorinated phosphates are satisfactory from the standpoint of fluorine but may not always be from the standpoint of available phosphorus. Iodine can be supplied as iodized salt.

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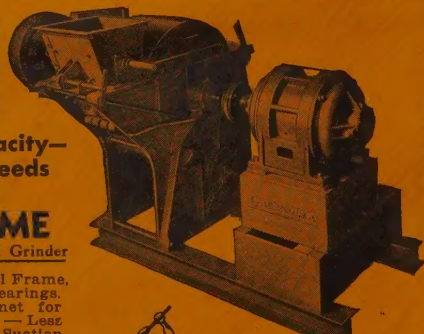
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